KILLING ME SOFTLY: A META-ANALYSIS EXAMINING RISK FACTORS ASSOCIATED WITH SUICIDE AMONG YOUNG AFRICAN AMERICAN MALES

A Dissertation

by

DEDRA DEANN LEMON

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

August 2008

Major Subject: School Psychology

KILLING ME SOFTLY: A META-ANALYSIS EXAMINING RISK FACTORS ASSOCIATED WITH SUICIDE AMONG YOUNG AFRICAN AMERICAN MALES

A Dissertation

by

DEDRA DEANN LEMON

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Approved by:

Chair of Committee,	Cecil Reynolds
Committee Members,	Michael Ash
	Patricia Larke
	Kimberly Vannest
Head of Department,	Michael Benz

August 2008

Major Subject: School Psychology

ABSTRACT

Killing Me Softly: A Meta-Analysis Examining Risk Factors Associated with Suicide among Young African American Males. (August 2008)

Dedra DeAnn Lemon, B.A., Spelman College

Chair of Advisory Committee: Dr. Cecil Reynolds

Increase in suicide rates of African American males since the 1960s has prompted a growing interest among researchers. Although research has increased in this area, suicide remains an issue that is explored far less often among African American males compared to other groups. Moreover, studies exploring risk factors associated with suicide in this group have led to inconclusive results. The current meta-analysis was conducted to synthesize the results of existing literature and to identify risk factors associated with suicide among African American males under the age of 30. Of 25 research articles published between 1970 and 2007 that met inclusion criteria, 48 units of analysis were obtained including 37,927 total subjects. The current analysis identified 57 risk factors that were categorized into 16 constructs: substance use, religion, economic, location, education, family, internalizing, externalizing, ethnic variables, stressor/ conflict, support, medical/somatic, psychological disorder, perception, age, and gender. Risk factors for suicidal behavior were coded and effect sizes between groups were computed. Age yielded the largest magnitude of effect such that suicidal groups of African American males were more likely to be younger than groups of

non-suicidal comparisons. Effect sizes of risk factors were also analyzed within four additional domains (attempters, ideators, ideators & attempters, and completrs). Results indicate that age and perception had the largest effects for attempts, while psychological disorders had the least effect. Effects for ideators were largest for substance use and medical problems, while religion was smallest. In a group of ideators and attempters, age was again found to have the largest effect while medical problems had the least. Lastly, factors associated with perception and psychological disorder had the greatest effect for completers while religion had the least effect. Effects of several factors such as religion, location, family, and ethnic variables did not change across suicidal subgroups suggesting that although their effects were not largest, they remained constant across behaviors.

DEDICATION

To my family, especially my nieces and nephews and all of my younger cousins. I may be the first in the family to achieve this degree, but I pray that I am not the last. May your reach exceed your grasp.

Also, to every young African American boy or young man who has lost his will to live.

ACKNOWLEDGEMENTS

First and foremost, I thank God for giving me life, strength, mercy, and the ability to endure. Thank you also for blessing me to be a part of a family whose love knows no end.

To my father, Thomas Lemon, Jr. and my mother, Patricia Lemon: thank you for creating me in love, supporting me, and raising me up in the admonition of the Lord.

To my siblings, Dale, Disa, Devin, Diona, and Durell: thank you for your support. I dislike it when either of you brag on me or comment to others about my accomplishments. However, I know that you are doing it because you are proud of me and you share my emotions. So please know that each time I achieve something you are achieving it as well.

To my nieces and nephews, Ashley, Viontre, Caleb, D.J., Tiana, and Cayden: be better than me. All of you are so talented and brilliant. Don't let anyone or anything (not even yourself) reduce you to just being attractive or athletic. Have substance and know your worth. Most importantly, keep God first and the possibilities are limitless.

To Christopher: good things come to those who wait. I've been waiting for a while and my time has come. Thanks for your sincere support.

To Yolanda: thanks for the statistics assistance. Your time and efforts are greatly appreciated.

To my extended family, church family, and friends: thank you for all of your support, understanding, and patience throughout my entire journey through graduate

school. During difficult times that I did not seem to know what to do or how to do it, I know that somebody, somewhere must have been praying for me. Thank you.

To my ancestors and grandparents who have passed away: thank you for opening doors for me and sacrificing so that I can have opportunities that were not allotted to you. I have spent countless hours in college and university classrooms learning from some of the best and brightest individuals in their respected fields. I have written lines upon lines of papers and read numerous volumes of books. Despite these efforts, I will never be as wise and as knowledgeable as many of you who were never allowed to set foot on a college campus or to even learn how to read. Thank you.

To my committee chair, Dr. Cecil Reynolds: thank you for your understanding, guidance, and support throughout my years in graduate school (especially towards the end). Although our time spent was limited, I learned so much from you just by watching, listening, and observing the way in which you handle matters. I appreciate you challenging me and not expecting less than what you know I am capable of producing. Enjoy your retirement from A&M.

To my committee members, Dr. Michael Ash, Dr. Patricia Larke, and Dr. Kimberly Vannest: thank you also for your support and guidance throughout this time. Your patience and understanding have been greatly appreciated and I am indebted to each of you.

TABLE OF CONTENTS

CHAPTER Page

LIST OF TABLES

Page

CHAPTER I

INTRODUCTION

"To be, or not to be, that is the question; Whether 'tis nobler in the mind to suffer the slings and arrows of outrageous fortune; Or to take arms against a sea of troubles, and by opposing, end them" (Shakespeare, 1603). During the soliloquy in which these well-known words were spoken, Hamlet captures the complexity of suicide as he grapples internally with the advantages and disadvantages of living. Could a gift as priceless as life cause such tribulation and discontent that death would be the more favorable option? From the beginning of time, mankind has struggled to resolve this paradox. Many years of misunderstanding, discomfort, and utter shame have created an eerie atmosphere surrounding suicide. As a result, many individuals continue to ignore the impact of suicide on individual lives and on society as a whole.

In America, one suicide is completed every 17 minutes (Doan, Roggenbaum, & Lazear, 2003). This unique act is a non-discriminatory method of death, as it impacts individuals from all walks of life. Although rates among groups differ, suicide affects individuals of various age, sex, socioeconomic status, race, and educational levels (among other factors). In order to understand the totality of suicide, it may be beneficial to examine it in detail among groups. One group of particular interest in recent years has been young African American males (Joe & Kaplan, 2001; Poussaint & Alexander, 2000; U.S. Public Health Service, 2000; Wingate et al., 2005). Historically, African

---

This dissertation follows the style of the *Journal of Black Psychology*.

Americans have completed suicide at much lower rates than Americans of European descent. However, there have been significant changes in suicidal patterns among [African Americans] (Joe & Kaplan, 2001), namely an increase in the rate of suicide completion and nonfatal suicidal behavior among adolescent and young adult African American males between the ages of 15 and 24 (Garlow, Purselle, & Heninger, 2005; Joe & Marcus, 2003). From 1980 through 1995, the suicide rate among young people increased by 146% for African American males (U.S. Public Health Service, 2000). The highest number and rate of suicide within African Americans is found within the adolescent and young adult population. For African American youth age 15-24, suicide is the third leading cause of death behind homicide and unintentional injury (Centers for Disease Control and Prevention, 2004). For purposes of this dissertation, risk factors associated with suicide among young African American males will be explored. The term risk factor will be used to describe any factor that is associated with an increased likelihood in suicide or suicidal behavior. It is important to note that risk factors do not necessarily imply causation.

Purpose of the Study

Although the literature exploring suicide in the African American community has expanded in recent years, no comprehensive study has been done to synthesize the results as they relate to young African American males. A number of studies have been conducted identifying risk factors for suicide among this group. However, the results have been inconclusive and existing suicide interventions seem to have no effect on reducing suicidal behaviors for this group (Willis, Coombs, Cockerham, & Frison,

2002). The purpose of this meta-analysis is to identify and synthesize current research findings regarding risk factors associated with African American male suicide. The goals of this dissertation are to (1) present a review of the literature and the theoretical background in which information regarding suicide is most commonly interpreted, (2) synthesize empirical studies that have explored African American male suicide, (3) identify significant and/non-significant factors that have been associated with an increase in suicidal behaviors among African American male youth, and (4) provide implications for future research and effective prevention and intervention programs.

Problem Statement

Examining suicide among young African American males can be challenging because of the numerous variables that potentially contribute to the occurrence of suicidal behaviors in this population. Although national reports have shown that the rate of African American male suicide has increased over the past few decades, the numbers may still be deflated because of faulty data collection and mislabeled deaths (suicides reported as accidental deaths or homicides). Although the reliability of accurate suicide rates may be questionable across all groups, the possible suicide/ homicide interaction among African American males offers a provocative perspective for consideration when examining suicide rates for this group. According to mortality statistics reported by the CDC (2004), homicide was the leading cause of death for African American males between the ages of 15-34. Several of these homicides are reported as being victim-precipitated, which suggests that an individual intentionally places himself in a position which results in them being slain by another. Many scholars suggest that these

homicides can be justifiably classified as suicides because of the intentional motive for self harm (Holinger &Klamen, 1982; Poussaint & Alexander, 2000). Since 1999, each year that African American male suicide rates have declined, rates of reported homicide/ legal intervention injury deaths have increased among this same group. Consequently, young African American men are dying one way or the other. In an attempt to understand suicidal behaviors better and more completely in the young African American male population, it may be helpful to identify critical risk factors in this group. Identifying these risk factors is important because it will help shed light on where the focus needs to be in regards to intervening and preventing suicidal behaviors.

Significance of the Problem

Suicide is not a phenomenon that occurs among African American men nearly as much as other types of deaths such as homicides or health related fatalities. Perhaps this is one reason why suicide is not a widely discussed topic among African Americans. In fact, research has shown that many African Americans view suicide as a "White thing" and do not feel that it is a problem within their community (Early & Akers, 1993). Because of views such as these, African American male suicide has been often overlooked. However, this problem deserves attention along with the other ills that society associates with this group.

Many scholars and media outlets have labeled African American males as "endangered" because of their likelihood to be victims of violent crimes, incarceration, poverty, unemployment, gang involvement, and discrimination (Gibbs, 1988; Jackson & Moore, 2006; Wright, 1991); thus insinuating that they are slowly dying out. The

perception of the term endangered as a descriptor for African American males has been criticized by some scholars (Wiley, 1992). Other print and media portrayals of African American males have also been critiqued. In an article exploring the academic success of young African American males, John Young (2007) stated that "In popular print and electronic media, African American males have been disproportionately portrayed as either incorrigible criminals or incredibly gifted and talented athletes or entertainers. The images of African American males being successful and accomplished scientists, mathematicians, professionals, researchers, or scholars are seldom seen." Societal images of African American male stereotypes may lead to self-fulfilling prophecies. In response to this situation, Ellis Cose (2002) offers the following piece of advice in his book, *The Envy of the World: On Being a Black Man in America*:

> Your best chance at life lies in rejecting what they- what much of America- tells you that you are, perhaps rejecting, in the process, ideas you have harbored for most of your existence of what it means to be [African American] and male.

Aside from exploring stereotypes, the examination of suicide within the young African American male population may be aided by noting other factors that affect this group also, such as educational variables. African American males are at-risk for experiencing academic and educational problems at alarming rates compared to other groups. Special education placement, disciplinary referrals, suspensions, expulsions, and drop-out rates are all elements that young African American boys continuously struggle with throughout the educational system (Davis, 2003; Kunjufu, 2005; Noguera, 2003).

In addition to these problems, young African American males also face bleak mortality rates. Homicidal, accidental and suicide-related deaths are common among this population (Centers for Disease Control and Prevention, 2003). In fact, researchers have found that "young [African American] men living in poor, high-crime urban America have death risks similar to people living in Russia or sub-Saharan Africa" (Murray, Kulkarni, & Ezzati 2005).

Another astounding characteristic of this population is its involvement with the criminal justice system. According to recent reports from the United States Department of Justice (2005), nearly half (46%) of our country's inmates between the ages of 18-24 are African American males. This percentage is disheartening considering African American males comprise less than 7% of the US population (United States Census Bureau, 2004). African American men are incarcerated at nearly 10 times the rate of European American men (United States Department of Justice, 2005). If these trends go unchanged, one in every three African American males born today can expect to be incarcerated at some point in his life.

Considering these elements affecting young African American males, Hamlet's famous question is reconsidered. To be or not to be? Does living in a society faced with distressing struggles, hardships, and future outcomes lead one to choose the option of death? Conversely, are young African American males choosing to accept this end by creating an environment that cultivates obvious acts of self-destruction? Exploring critical risk factors that are associated with suicide in this population will help to answer these and other questions.

Research Questions

1. What are consistent risk factors associated with suicidal behaviors within ideators, attempters, completers, and combined groups?
2. Which risk factors are consistent for suicidal behaviors among subgroups of African American males (ie. inner city vs. rural, inpatient vs. outpatient, community vs. school, single parent vs. two parent household, etc.)?
3. Do effect sizes differ based on type of risk factor (ie. individual vs. societal/environmental factor)?
4. What theoretical explanation, if any, adequately explains the increase in young African American male suicide over the past few decades?

Definition of Terms

Risk factor	Any variable that is associated with an increased likelihood of an occurrence. In this study, a risk factor implies a positive correlation with suicide and/or suicidal behavior. Some examples of risk factors that have been shown to be associated with suicide include depression, hopelessness, and drug/alcohol abuse.
Suicide	The act of intentionally ending one's own life. Suicide can be completed by the deliberate taking of one's own life or by the willful refusal to escape death (such as not exiting a burning building or by purposely creating a no escape situation).
Suicide attempt	A suicidal act that results in a nonfatal outcome. A suicide attempt is most accurately categorized when intent to die is present.

Suicidal ideation	Thoughts of taking one's own life. Suicidal ideation may or may not involve developing a plan to complete suicide.
Suicidal behavior	Any deliberate act that has a potentially life threatening consequence.
Self destructive behavior	Actions that bring about harm or damage to one's own mind or body. Self destructive behaviors may not always be deliberate or suicidal. However, they always produce a form of harm to one's self. Some forms of self destructive behaviors that result in death may often be reported as accidents, such as a drug overdose.
African American	This term is used to describe Americans of African descent. In this study, African American describes ethnicity not nationality. The term "Black" may be used interchangeably with African American for those who identify themselves in terms of race. However, for purposes of consistency the term "Black" has been replaced with African American throughout this study. Brackets have been inserted around the term to indicate a substitution was made. Likewise, the term "White" has also been replaced with European American throughout the study for consistency purposes.

CHAPTER II

LITERATURE REVIEW

Examining suicide can prove to be a complex task because of its low base rate of occurrence. Gathering data on suicide can prove to be difficult because the subjects are not available to provide information. Therefore researchers must rely on alternative forms of data collection to obtain accurate information. One method that has become increasingly popular over the past few decades is referred to as the psychological autopsy technique. Psychological autopsy is a term first coined in 1977 by the Los Angeles Medical Examiner's Office to investigate suicide cases (Shneidman, 1977). It refers to a psychological profile usually developed after suicides or suspicious deaths. During a psychological autopsy, data are gathered from several sources such as: interviews with family and friends, medical history, mental health history, writings by the deceased, school records, criminal justice involvement, military records, etc. Many researchers have used this method to help identify risk factors associated with suicide.

Studying suicide from an ecological perspective is also a common way to research this phenomenon. Researchers often use national longitudinal data from organizations such as the Centers for Disease Control and Prevention (CDC) to identify trends and patterns among certain groups. This allows demographic risk factors to be identified and compared (Joe, 2006). The social correlate method is also used by researchers to identify social factors that influence suicidal behaviors. Researchers have also used case-studies to examine suicidal behaviors. This allows individual characteristics to be comprehensively explored.

Although the aforementioned methods have become widely-used means to study suicide, there continues to be controversy and uncertainty surrounding the reliability of research and statistics related to suicide. There are several factors involved in the labeling of death that may impact the accuracy of suicide statistics. Some of these factors include the misclassification of suicides as accidents. Common examples of this may be deaths resulting from automobile accidents (particularly those involving one vehicle) and drug overdoses that are classified as accidental deaths. Although consistency of suicide reporting has increased over the past few decades, there continues to be room for human error in classification. This error may occur because the responsibility to label a death often falls into the hands of a coroner or medical examiner. These individuals are often influenced (directly and/or indirectly) by social, cultural, and religious factors. In a study by Hugh Whitt (2006), he found that the number of suicides reported for New York City by the National Center for Health Statistics (NCHS) dropped suddenly in 1985 and remained extremely low until 1989. An examination of the five city boroughs indicated that suicides dropped by rates ranging from 48% to 91% during that time compared to rates before 1985. In the Bronx, for example, reported suicides dropped from an average of 113 down to only 14. However, the rates remained the same in the suburbs. The validity of these extreme changes in suicide rates were questionable considering the personnel and policy changes in the city's Chief Medical Examiner's office during those same years. Perhaps human error and/or pressure influenced the accuracy of the reported suicides since the rates changed only after personnel and policy

changes, but did not change in suburban areas where personnel and policy remained the same.

Aside from controversies related to misclassification and labeling of deaths, investigating suicide presents challenges in the field of research as well. Differences in nomenclature related to suicide across studies have led to inconsistencies in research analyses and findings. According to Morton Silverman (2006) the purpose of a standard nomenclature "is to facilitate communication among clinicians, researchers, and public health practitioners by providing terms than can be applied in different settings and populations (p.520)." Variations in the definition of terms such as suicide, suicidal ideation, suicide attempt, and suicidal behavior may potentially lead to inconsistencies in regard to comparison research across groups, countries, and populations. Many differences in definitions stem from various theoretical perspectives and fields of study (i.e. psychology, psychiatry, sociology, public health, philosophy, etc.). For purposes of this dissertation, procedures used to ensure consistency across terms will be discussed in the methods section.

Theoretical Perspectives

Emile Durkheim

Renowned French sociologist, Emile Durkheim, introduced a unique and innovative concept in his 1897 book entitled "Suicide." In this work, he offered a sociological explanation for this phenomenon which had previously been regarded as exclusively psychological and individualistic. He used the word suicide to refer to "all cases of death resulting directly or indirectly from a positive or negative act of the victim himself, which he knows will produce this result." He proposed that every suicide falls into one of four categories, based on the degrees of imbalance of two social forces: social integration and moral regulation. He labeled the first type of suicide as egoistic, and described it as resulting from too little social integration. On the other hand, the second type of suicide was termed altruistic, and resulted from too much integration. Self sacrifice was the defining trait of this type of suicide. Individuals who lost sight of their individuality and sacrificed themselves for the interest of the group fell into this category. A common example of altruistic suicide may occur among members of the military or members of a cult. Durkheim's third type, anomic suicide, resulted when individuals were unable to adjust to changes in his/ her social or personal life. The fourth type was labeled fatalistic suicide and described those deaths resulting from overregulated, unrewarding lives. "It is the suicide…of persons with futures pitilessly blocked and passions violently choked by oppressive discipline." Although Durkheim did not go into much detail about this fourth type of suicide, it offers an interesting perspective while examining the African American male population.

Durkheim's theory also acknowledged the connection between suicide and homicide. He suggests that periods of increased suicide rates feature disproportionately high homicide rates as a result of chaos, lawlessness, and economic disparity during times of brisk social change. He speculates that both suicide and homicide are caused by economic and social forces that affect the moral consciousness of an individual (Willis, Coombs, Cockerham, & Frison, 2002). During times of economic prosperity or rapid recession, individual commitment to society may be weakened and severe stress may be encountered leading some individuals to egoistic suicide or to homicidal reactions against unacceptable changes. Anomic suicide may also occur from individuals who cannot cope with the societal changes. If society begins to devalue human life because of economic changes, individuals who retain a high moral regard for human life will commit suicide and individuals with lesser regard will commit homicide.

Sigmund Freud

Sigmund Freud also made an influential contribution regarding suicide in his 1917 paper, "Mourning and Melancholia." In this paper, Freud depicted what we now call depression and links it to suicide as a mourning reaction. He describes mourning as a loss of interest in the outside world and suggests that melancholia is an unjustified loss of self esteem. "In mourning the world has become impoverished and empty, during melancholia, it is the ego itself (p. 246)". Freud suggests that lowered self-regard is a feature of the melancholic (depressed) individual. He theorized this self-hatred is actually unconscious mourning over a loss of someone or something. Essentially, it is a re-direction of repressed rage toward a love object or an oppressor that is turned back on

oneself. He suggested that suicide is hostility toward other objects directed toward the self, forcing the ego into death.

After Freud, Alfred Adler expressed a neo-analytic view of suicide in which he described it as an interpersonal act that is caused by insufficient social interest. He revised Freud's theory slightly by suggesting that individuals engage in acts of self-destruction hoping to evoke sympathy and cast reproach on those responsible for his/her lack of self esteem (Adler, 1958). Therefore an individual hurts himself in order to hurt others. Freud and Adler's perspectives were preceded by Wilhelm Stekel, one of the speakers at the 1910 Vienna Psychoanalytic Society's Symposium addressing suicide among young students. Stekel stated that "no one kills himself who has never wanted to kill another, or at least wished the death of another (p.87)."

Other psychoanalytically derived theories stem from Jungian traditions and suggest that suicide represents a desire for rebirth or resurrection to a better life. According to these thoughts, suicide is conceptualized as a magical act of regression towards a better self (Jung 1959; Wahl, 1957).

Postmodernism

While Durkheim's paradigm has guided much of the research on suicide, many researchers are looking to more postmodern explanations to study this occurrence. Postmodernism is described by Seidman (1995) as "de-differentiation"- the breakdown of boundaries between social institutions and cultural spheres and the "de-territorialization" of national economies and cultures. Postmodern theorists view this era as beginning in the early 1970s as a result of a decline in rational problem solving in the

arena of governmental decision making. As a result, “big” government and grand solutions to social problems slowly ended (Willis, Coombs, Cockerham, & Frison, 2002). Postmodernism emerged and replaced modernistic ideals such as rationality, objectivity, and other ideas rooted in the Enlightenment movement. Postmodern theories take into account economic, social, political, and moral conditions instead of making foundational assumptions. The following theories are based on postmodern ideology.

Ulrich Beck

The risk society described by Ulrich Beck (1992) classifies the current societies that exist between “postmodern risk” and industrial society. Beck states that, “ in the nineteenth century, privileges of rank and religious world views were being demystified; today the same is happening to the understanding of science and technology in the classical industrial society, as well as to the modes of existence in work, leisure, the family and sexuality.” Consequently, risks occur which are probabilities of physical harm that threaten our trust in society and lead to insecurity. Unstable employment, violence, lack of family support, and economic stress are examples of circumstances that can produce risk. Over the past few decades, the African American community has become less cohesive and more individualistic. African American youth today do not have the same family, community, and religious supports that their predecessors had. The risk society theory explains how high unemployment, low levels of education, few resources, and lack of family structure within the African American community may increase the personal risks of the group which can lead to higher rates of suicide.

Deindustrialization

Another postmodern theory of increasing familiarity is the deindustrialization theory. Kubrin, Wadsworth, and DiPetro (2006) suggest that the increase in African American male suicide over the past few decades can be explained by William Wilson's deindustrialization theory. Wilson suggests that widespread economic changes since the 1960s have altered the socioeconomic structure of American inner cities. The decline of urban manufacturing industries in the 1960s led to a reduction in employment opportunities for less educated urban residents. Many of these African American inner city residents were already faced with discrimination and few resources, so securing adequate employment became increasingly difficult. As a result, the economic well being of African American communities was altered. Individuals and families who could afford to leave relocated to middle-class suburban areas. The removal of middle and working-class African American residents from the inner cities caused a ripple effect of negativity in several areas. These individuals served as role models for younger generations and also as visible community leaders in areas such as business, religion, and education. As they left the inner cities after the 1970s, joblessness, poverty, educational failure, suicide and family disruption all increased within the African American community (Kubrin, Wadsworth, & DiPetro, 2006).

Alvin Poussaint

The rise in African American suicides has also been linked to the ramifications of slavery. In 2000, Harvard psychiatrist Alvin Poussaint wrote a book entitled "Lay My Burden Down: Suicide and the mental health crisis among African Americans." In this

book, he explores the dramatic rise in black suicides since the 1970s. He introduced the concept of posttraumatic slavery syndrome and described it as "the persistent presence of racism… that has created a physiological risk for black people that is virtually unknown to [European] Americans." He attributed the sharp rise in black suicides (especially among black men) partly to this phenomenon. Poussaint also suggests that some victim-precipitated homicides and drug related deaths may also be viewed as forms of suicide. He feels that many of the mental, physical, economic, judicial, and emotional ills affecting the African American community are a direct byproduct of the nation's historical treatment of this group as a whole.

Lay Theories

There are several lay theories regarding suicide that are widely accepted and spread throughout the African American community. Lay theories refer to common beliefs held by lay persons in the population. One lay theory includes the idea that suicide does not occur within the community because it is viewed as an unforgivable sin by most African Americans. For that reason, regardless of what circumstances an individual may be experiencing suicide would not be an option because God is ultimately in control of life, not man. The basis of lay theories such as these has been built mainly upon anecdotal and qualitative information. Empirical studies regarding lay beliefs within the African American community regarding suicide rarely have been conducted. Walker, Lester, and Joe (2006) addressed this concern by examining culturally relevant suicide beliefs and attributions among a sample of African American and European American college students. Several scales measuring concepts such as

attitude towards suicide, stigma, life ownership, and suicidal ideation were administered. When compared to their European American counterparts, results indicated that African Americans were significantly more likely to attribute ownership of life to God and were less likely to report that suicide is attributed to an interpersonal problem. Although these results confirmed some lay beliefs, more comprehensive research continues to be needed in this area.

Review of Risk Factors

Although there continues to be some debate regarding the accuracy of suicide statistics and research (as mentioned above), there are several risk factors that consistently have been shown to be associated with suicide among widely researched groups. These risk factors are described below, with particular emphasis on their effects within the African American male population.

Depression

Although most individuals who suffer from depression do not die by suicide, estimates suggest that nearly 60% of suicide victims suffered from depression or some form of mood disorder at the time of death (Dumais et al., 2005; Shaffer, Gould, Fisher, Trautman, Moreau, Kleinman, & Flory, 1996; Thompson, Kaslow & Kingree, 2002). African Americans are more likely than other ethnic groups to be underdiagnosed and undertreated for depression (Das, Olfson, McCurtis, & Weissman, 2006). [European Americans]s are more likely than African Americans to be diagnosed with depression and other mood disorders at rates ranging from 7% to 33% (Butterfield et al., 2004;

Mark, Palmer, Russo, & Vasey, 2003; Neighbors, Trierweiler, Ford, & Muroff, 2003; Strakowski, et al., 2003, Trierweiler et al., 2000).

In the African American community, depression (like suicide) has historically been viewed as a phenomenon that has little, if any, occurrence among its people (Das, Olfson, McCurtis, & Weissman, 2006; Poussaint & Alexander, 2000). Many psychologists during the early 20th century held the belief that African Americans were psychologically unsophisticated and were inherently not prone to experiencing depression because of their high spirits, religious excitement, and mental inferiority (Bevis, 1921; Ferguson, 1916; Hall, 1904; Mayo, 1913; Prange & Vitols, 1962; Prudhomme, 1938). In studying African Americans in southern state hospitals, Bevis (1921) suggested that most of the race is care-free, lives in the present, has little depression, lacks initiative, is suspicious of his own people, is full of mysticism and superstitions, and rarely have suicidal tendencies. Several decades later, Prange and Vitols (1962) write that "a number of factors may contribute to the infrequency of [depression]" in African Americans. Among these factors, the authors describe African Americans as having limited expectations, which serve as a buffer during times of loss. Social oppression was also described as offering the "southern [African American] a psychological boom: it supplies him a ready-made villain." Lastly, the authors suggested that African Americans disown responsibility and locate misfortune outside themselves which is the "converse of the introjective mechanism fundamental to depression." Many of these views emerged during times of unconcealed racial prejudice and social injustices towards African Americans when a great deal of scientists, psychologists,

anthropologists, etc. intended to prove the inferiority of the race. Although these views may not currently be overtly imposed on the African American community from outside sources, more present research suggests that depression continues to be perceived as a phenomenon that is uncommon among this group and is misperceived among many of its' members.

In a study conducted by Shellman, Mokel, and Wright (2007) a sample of older African Americans provided qualitative information regarding their beliefs and attitudes towards depression. Results indicated that the participants perceived depression as a personal weakness as opposed to an illness- such as diabetes. These participants also viewed depression as something that can be controlled through their faith and belief in God. Likewise, young African Americans (particularly males) tend to attribute symptoms of depression to factors that are unrelated to psychological and/or medical causes. Kendrick, Anderson, and Moore (2007) found that a sample of 18-25 year old African American males attributed symptoms of depression- as outlined in the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision*- to normal aspects of being an African American male instead of viewing the symptoms as part of depression. In this study, five categories emerged from analysis that best described the young men's perceptions of depression in general. Those categories are: (1) stress, (2) a sense of "difference," (3) encounters with the police, (4) "chilling"/coping, and (5) depression as a fact of life.

Recent studies have shown that community factors, such as economic level and exposure to violence may impact depressive symptomatology. In a study of 1,538

African American adolescents, Fitzpatrick et al. (2005) found that subjects exposed to more threatening and violent environments reported more depressive symptoms. Considering the link between depression and suicide, these findings should not be ignored when studying African American males.

Hopelessness

Hopelessness has been defined as a system of cognitive schemas whose common denomination is negative expectations about the future (Beck, Weissman, Lester, & Trexler, 1974). Hopelessness may involve uncertainty about the future, doubts one will survive to adulthood, expectations of future unhappiness, and low expectations about reaching one's goal. Hopelessness has been found to be associated with several outcome variables such as suicide, suicidal ideation, school completion, job attainment, violence, gang membership, substance use, and sexual behavior (Bolland, 2003; Durant, Mercy, Kresnow, Simon, Potter & Hammond, 2006; Gibbs & Bankhead, 2000; Worrell & Hale, 2001). Durant et al. (2006) found that "hopelessness is a stronger risk factor for a nearly lethal suicide attempt for young [African Americans] compared to young [European Americans]," although the prevalence of hopelessness was not greater.

Feelings of hopelessness have been found to be common among individuals living in high-poverty and inner-city neighborhoods (Anderson, 1999; Banfield, 1974; Bolland, 2003; MacLeod, 1987). Residents of low-income communities may be faced with environmental factors such as unemployment, exposure to violence, limited public service, and low-performing schools. Although these factors impact all groups of people living in these areas, many African Americans continue to face racial discrimination and

prejudice, which may cause them to perceive their life chances differently from other groups (Thompson & Hickey, 1994). In a study examining hopelessness and risk behaviors among inner-city youth, Bollard (2003) found that "hopelessness may affect males in more profound ways than females, leading to steeper trajectories in their risk behaviors." In this study of 2468 adolescents (aged 9-19), 98% of the respondents were African American. Risk behaviors such as carrying a gun, drinking alcohol, getting drunk or high, and having a child were significantly more prevalent among males with high levels of hopelessness than comparable females. Perhaps hopelessness impacts inner-city males differently than females because males tend to be more affected by factors such as racial discrimination, job loss, and negative interactions with the criminal justice system.

In a study examining the origins of hopelessness among inner-city African American youth, Bolland, Lian, and Formichella (2005) found that hopelessness is not universal in low-income areas. There are both risk and protective factors within poverty that are associated with feelings of hopelessness. Results of this longitudinal investigation of 5895 youths suggested that disruptions such as "change in mother figure, witnessing violence, traumatic stress, and worry led to increases in hopelessness over time." Conversely, "connectedness to neighborhood, mother figure, religious beliefs and activities" led to decreases in hopelessness over time.

Substance Abuse

Drug and alcohol use has been widely shown to be associated with an increased risk for suicide in adults as well as adolescents (Brent, Perper, Moritz, Baugher,

Schweers, & Roth, 1994; Dougherty, 2007; Marttunen et al., 1995; Murphy, Wetzel, Robins, & McEvoy, 1992; Roy & Linnoila, 1986; Swahn & Bossarte, 2007). In 2004, the CDC analyzed test results of suicide victims in the 13 states that collected data for the National Violent Death Reporting System (NVDRS). The report generated from that analysis indicated that of the suicide victims tested, 33.3% were positive for alcohol and 16.4% were positive for opiates (Karch, Crosby, & Simon, 2006). Because substance use and abuse may lead to many negative outcomes such as adverse health concerns and deaths, many programs and initiatives have been established to encourage young people to avoid inappropriate drug and alcohol use. To monitor the prevalence of youth risk behaviors that contribute to the leading causes of death, the CDC established the Youth Risk Behavior Surveillance Survey (YRBSS). According to the 2005 results from a nationally representative sample of 9th through 12th grade students in the United States, alcohol continues to be the most commonly used drug (43.3%) among high school students, although its current use has decreased since 1991 (50.8%). However current marijuana (20.2%), cocaine (3.4%), and illegal steroid use (4%) have increased among students respectively since 1991 (14.7%, 1.7%, and 2.7%). Survey results also indicated that African American teenagers were less likely than European American and Hispanic students to engage in current alcohol and cigarette use. Current marijuana use was equally likely among groups. These results differ from some misperceptions that African American youth engage in more substance use than their peers. This notion may exist for several reasons.

African American youth are more likely to experience social problems as a result of drug use compared to their European American counterparts (Scheier & Botvin, 1998). For African American males, especially in urban areas, substance use seems to have more severe consequences than for European American men, European American women, and African American women. African American men are more likely to be arrested and incarcerated for drug abuse violations even though they are not the highest group of drug consumers. According to the Bureau of Justice Statistics, 63.6% of individuals arrested for drug abuse violations in 2006 were European American whereas 35.1% of those arrested were African American. Although a higher percentage of state drug abuse arrests are of European American individuals, African Americans comprise approximately 45% of drug offenders held in state prisons compared to 26% of European Americans and 20% of Hispanics (Sabol, Couture, & Harrison, 2007). This finding suggests that African Americans have a much greater risk of being charged and incarcerated for drug offences than other groups. Several factors may contribute to the disproportionate social effects of drugs on this group. Differential drug marketing, increased poverty, high unemployment rates, marginalization, limited access to mental and medical healthcare, and inadequate educational resources are all community characteristics that may contribute to the problems caused by substance use and abuse among African Americans.

In regard to suicide, it is important to consider how the aforementioned issues regarding substance use uniquely impact this group. Preventive literature about substance use and suicide risk factors often generalize results to all groups even though

African Americans (particularly males) are often not well represented in research studies. Additionally, because the substance use experiences of African Americans (as mentioned above) are somewhat different from other groups, additional research is needed in order to better determine suicide risk associated with substance use in this group.

Psychotic Disorders

Psychotic disorders refer to a number of mental illnesses that include a gross impairment in reality testing as a defining feature. Classic symptoms of psychotic disorders may include delusions, hallucinations, severe regressive behaviors, dramatically inappropriate mood, and markedly incoherent speech. Commonly recognized psychotic disorders include schizophrenia and delusional disorders. Some mood disorders, such as depression and bipolar may also occur with psychotic features in some individuals. Research has widely shown that individuals with psychotic disorders have higher risks for completing suicide (Brent et al., 1988; Brent et al., 1993; Brown, 1997; Caldwell & Gottesman, 1990; Fenton, 2000). According to the National Institute of Mental Health, about 10% of individuals with psychotic disorders, such as schizophrenia, die by suicide and a greater percentage attempt suicide (USDHHS, 2007).

In the general United States population, the lifetime prevalence of psychotic disorders is about 0.5-1.5% (American Psychiatric Association, 2000). Unlike depression, findings suggest that African Americans are more likely to be diagnosed with severe psychotic disorders in clinical settings than European Americans who exhibit the same symptoms (Barnes, 2004; Blow et al., 2004; Hampton, 2007; Snowden

& Cheung, 1990). Although recent efforts have been made to improve the accuracy and effectiveness of diagnosis and treatment of psychotic disorders among African Americans, there continues to be disparity in some areas. In analyzing data from two national surveys (National Ambulatory Medical Care Survey & National Hospital Ambulatory Medical Care Survey) over an eight year period, Daumit et al. (2003) found that atypical antipsychotic prescribing gaps closed for some ethnic groups over time but persisted for African Americans. Findings such as these are important because research has shown that atypical (or second-generation) antipsychotics are more effective than traditional antipsychotics in treating the symptoms of psychotic disorders (Kuno & Rothbard, 2002). These more successful treatments are also more costly. To control for this variable, Opolka et al. (2004) compared patients in the Texas Medicaid system that were similarly insured and had similar incomes. Results indicated that African Americans (particularly males) were significantly less likely than other groups to receive atypical antipsychotic drug treatments.

When examining risk factors associated with suicide in African American males, these issues related to psychotic disorders should not be ignored. As previously mentioned, the presence of a psychotic disorder increases suicide risk significantly. The overdiagnosis and undertreatment of these disorders may have detrimental effects on the overall mental health of the African American male. According to Hampton (2007), some possible explanations for the disparities include client-level factors (delay in treatment seeking, not reporting symptoms), physician-level factors (discrimination, lack of cultural awareness), and/or systems-level factors (accessibility of services). Research

has also shown that some ethnic minorities tend to hold stigmatizing attitudes towards mental illness and are underrepresented in mental health research (Brown, Abe-Kim, & Barrio, 2003; Cooper-Patrick et al., 1999; Das, Olfson, McCurtis, & Weissman, 2006; Poussaint & Alexander, 2000; Shellman, Mokel, & Wright, 2007; U.S. Department of Health and Human Services, 2001). Perhaps all of these factors (or combinations of them) contribute to the negative effects of mental illness on the African American community. Because of the disparities that exist, African Americans suffering from psychotic disorders are faced with a greater disability burden. For African American males especially, increased vulnerability to incarceration, homelessness, substance abuse, homicide, and suicide occurs when mental illnesses are not treated properly (Bryant, Ro, & Rowe, 2003).

Family Dynamics

Family dynamics present unique characteristics because they can serve as both risk and protective factors. Research has shown that individuals residing in supportive and cohesive households have more positive future outcomes, while family dysfunction is associated with an increased risk for many negative outcomes including suicide (Harris & Molock, 2000; Johnson et al., 2002; Lewinsohn, Rohde, & Seeley, 1994; Randell, Wang, Herting, & Eggert, 2006). Family dynamics consist of several variables that may include parenting style, marital status, head of household, parental age, number of offspring, household income, number of individuals residing in the household, parental education level, and parental involvement among other factors. In a study comparing 1,083 at-risk high school students, Randell et al. (2006) found that perceived

conflict with parents, family depression, family support satisfaction, and availability of family support for school were the strongest predictors of adolescent suicide-risk behaviors. Decreased risk was associated with family support for school and parental involvement. These results are important in considering the crucial role that the family plays in shaping an individual's future. When studying family dynamics related to the African American male, many issues must be addressed.

African American men suffer worse health than any other racial group in America, they have lower life expectancies than other groups, and they have higher death rates than women for all leading causes of death. Additionally, homicide is the leading cause of death among African American males age 15-24, as 1 in 30 has a chance of dying by homicide compared to 1 in 179 European American men, 1 in 132 African American women, and 1 in 495 European American women (CDC, 2004). As mentioned previously, African American men also are arrested, convicted, and incarcerated at rates far more than other groups. Because of these high death and incarceration rates, the dynamic of the African American family has been altered. When these men become victims of death and of prison, households and families are left without fathers, brothers, and sons. This may affect young African American males because they are often left without a role-model in the form of a present father at home. Because sons and fathers tend to have more intimate relationships than daughters and fathers (Clark-Lempers et al., 1991), boys may be affected more negatively by their fathers being absent.

For African American adolescent males, father support has been found to be associated with higher self-esteem, fewer depressive symptoms, reduced stress, lower levels of substance abuse, and fewer suicidal ideations (Grant et al., 2000; Tarver et al., 2004; Zimmerman, Salem, & Notaro, 2000). It is important to mention that father support does not necessarily suggest that the father is always present in the home. The absence of the father from the home does not imply that he is not involved and does not provide support for his children. However, some conditions such as death and incarceration (as aforementioned), cause the level of support by many African American fathers to be lower than where it could potentially be.

Aggression/ Violence

Aggression generally refers to physical or verbal behaviors that are intended to cause hurt or pain (Berkowitz, 1993). Different types of aggressive behaviors have been widely researched and two categories of aggression (reactive and proactive) have typically been observed. Reactive aggression generally refers to impulsive and angry responses to aversive events, while proactive aggression generally refers to unprovoked aggression that is used for gain or dominance (Berkowitz, 1993; Dodge & Coie, 1987; Vitiello & Stoff, 1997). Numerous studies have identified measures of aggression as risk factors for suicide attempts as well as completed suicide (Angst & Clayton, 1998; Michaelis et al., 2004; Romanov et al., 1994; Shaffer et al., 1996). In a theoretical review of studies on aggression, Conner et al. (2003) suggest that reactive aggressive individuals have higher risks for suicide because of their emotional dysregulation and

susceptibility to interpersonal problems. They also suggest that suicide itself is a reactive aggressive response to psychiatric and interpersonal difficulties.

Aggression and violence related to young African American males has been the topic of much interest and discussion over the past few decades. Research has shown that this group is more likely than other groups to be overrepresented as victims, witnesses, and as perpetrators of violent crimes (CDC, 2004; Fingerhut & Kleinman, 1990; Reiss & Roth, 1993). Although African American males are often linked to violence and aggression, these behaviors should not be automatically attributed to this group. Many young African American males engaging in acts of aggression and violence are residents of low-income inner city communities. These communities are plagued with issues that leave authors such as Andrulis (1997) to suggest that inner city residents have more commonalities with third world country residents than with residents of their own metropolitan area. Thus some would argue that the environment (and circumstances of life therein), not the actual individuals living in the environment, produce many of the ills related to crime and violence. Factors such as poverty, racism, access to weapons, and unemployment should be taken into account when examining these issues. Differential treatment by police, employers, and in schools should also be factored in when looking at African American male aggression and violence. In order to survive in many poor inner-city communities, Elijah Anderson (1994) suggests that a "code of the streets" must sometimes be employed by many young people growing up. This subculture of the streets consists of a set of informal rules that regulate the "use of violence and so allow those who are inclined to aggression to precipitate violent

encounters in an approved way (p.295).” Although this subculture is often conflicting with many individuals’ family culture and values, it is often followed on the streets reluctantly out of fear in order to avoid conflict.

Along with the street subculture, the availability and lethality of firearms in the inner-city may also contribute to the high rates of violence. Snyder et al. (1996) suggest that the increase in juvenile homicide from the mid-1980s through the mid-1990s was completely firearm related. He found that 46% of African American juvenile homicides and 39% of European American juvenile homicides involved firearms during the early 1980s, whereas the percentage increased to 71% and 54% respectively during the early 1990s. Like homicide, firearm related suicides have increased among African American male youth as well. In a method-specific analysis of suicide completion, Joe & Kaplan (2002) found that the rate of firearm related suicides increased 133% for 15-19 year old African American men and 24% for 20-24 year old African American men between 1979 and 1997. During that same time frame the increase was only 7% for 15-19 year old European American males, while the rate for 20-24 year old European American males did not change. Findings such as these encourage the examination of socio-demographic and environmental issues in regards to aggression, violence and suicide among young African American males.

Summary and Critique

The existing literature consistently identifies several common risk factors that were described above. In summarizing the effects of these variables, it seems that suicide occurs during states of extreme emotional distress. Suicide does not occur in emotionally healthy and well-adjusted individuals. The distress experienced in suicidal individuals may be brought upon by individual and/or environmental influences. Some individual (within-person) factors mentioned include mental and psychological disorders such as schizophrenia, depression, and substance abuse. Although these problems are experienced at the individual level and may involve biological/chemical components, environmental influences also have an impact. The diathesis-stress model offers a useful approach for viewing these suicide risk factors from a bio-psychosocial standpoint.

Risk factors such as family problems and violence are more associated with environmental influences. The distress experienced by these factors is more directly caused by external circumstances that are usually beyond an individual's control. A child does not have the opportunity to choose which family he or she will be born into or which community they will grow up in. Community influences such as violence, crime, and poverty have great impacts on the emotional and behavioral functioning of its residents. The ramifications of living in an unsafe environment (at both the family and community level) can present psychological concerns for even the most mentally healthy individuals. However, based on some of the cited research positive family support and cohesion may offset some risks.

When summarizing these risk factors, problems arise because most suicide research has historically included insufficient numbers of African Americans (especially males). Moreover, many comparison studies that have addressed ethnic differences combined racially diverse groups. This presents challenges with generalization because all minority groups have different experiences and cultures that impact their lives in unique ways. Likewise, within-group differences are also important to study. This is particularly relevant for suicide research given the vast differences in completion rates and attempts between males and females.

Expansion of the research base exploring African American male suicide is critical for the development and implementation of effectively relevant prevention and intervention programs. The interactions of race, gender, and class cause this group to experience societal forces that many other groups do not face. Far too often, literature provides information about this group from a cultural-deficit standpoint, attributing problems to within-person characteristics. Information regarding disproportionate incarceration rates, elevated homicide rates, and high crime rates is readily available in academic and news journals. However, literature exploring the impact of environmental and societal factors on this group is scarce. Consequently, a great deal is known about many of the problems that African American men are facing but little is known about why those problems persist.

Researcher Expectations

Although suicide among young African American males has received increased attention in recent years, empirical studies identifying risk factors have yielded inconclusive results. Therefore, it remains unknown whether current interventions are relevant for this population. To date, no study has combined the findings of the existing literature regarding risk factors associated with young African American male suicide. The purpose of the present study is to synthesize the results of the empirical research that has been conducted in this area in order to provide accurate and relevant information that will contribute to the prevention of this occurrence. The following findings are expected by the researcher:

1. Hopelessness will have the largest effect sizes for completed suicide across all risk factors.
2. Depression will have the largest effect sizes for suicidal ideation.
3. Males residing in high violent/high crime neighborhoods will have the largest effect sizes for self destructive behaviors.
4. Effect sizes for adverse family variables will be higher among adolescents and teenagers.
5. Effect sizes for psychological disorders and substance abuse will be larger among older individuals.

CHAPTER III

METHODS

Overview of Meta-Analysis

Meta-analysis is a statistical method used to synthesize research findings from a large number of studies and determine whether significant trends occur. It is described by several researchers as the best-known and most flexible method available to combine literature (Cook et al, 1992). It is particularly powerful and unique because it allows a researcher to examine many types of studies conducted by different investigators. It also allows analysis of studies that address the same research question but use different instruments. Meta-analysis examines patterns across studies and provides statistical estimates of the likelihood of significant effects. Effect sizes are the primary outcome of meta-analysis. Gall, Gall, and Borg (2005) define effect size as an estimate of the magnitude of a difference or relationship in the population represented by a sample. These effect sizes provide the basis by which trends in the literature are illuminated and relevant programs are initiated (Glass, 1977). Common examples of effect size statistics used to express significance include Pearson's *r*, Glass' delta, Hedges' *g*, and Cohen's *d* (Cohen, Cohen, West, & Aiken, 2003; Rosenthal, 1994).

The present study employs use of Cohen's *d* statistic. This standardized effect size estimate is appropriate because it allows differences to be determined between suicidal and non-suicidal groups without the influence of sample size. Magnitude of the effect is usually determined based on the following reference: 0.2 indicates a small effect, 0.5 indicates a medium effect, and 0.8 indicates a large effect. While examining

effect magnitude, moderator variables must also be considered. Moderator variables mediate the relationship between two variables and systematically, instead of randomly, influence effects size (McNamara et al., 1998). Identifying moderator variables helps to determine whether effects are constant across varying circumstances (Cooper & Hedges, 2004).

Procedure for the Review

An investigation of suicides of young African American male suicides and related behaviors conducted between 1970 and 2007 was undertaken. This timeframe was selected in order to focus on the most recent data available and to produce a manageable database. Additionally, previous research and national reporting mortality statistics indicate that suicide rates among young African American males began to rise around the 1970s. This time frame also corresponds to the post-civil rights movement and many related social changes that may impact suicide rates. Viewing studies form the 1970s forward seems to offer the greatest likelihood of providing stable or at least consistency of results.

A computerized literature search was initially performed to collect studies from electronic databases. The electronic search was used to enhance the possible number of studies collected for inclusion. Databases searched for primary studies included PsycINFO, Education Abstracts, ERIC, Digital Dissertation Index, Social Services Abstracts, and Medline. Key search words and descriptors included suicide, suicidal, risk, factors, predictors, race, ethnicity, African Americans, Black, Negro, and males. Titles and abstracts of keyword search results were reviewed before studies were

electronically or manually obtained. References of those studies were also reviewed and obtained based on their relevance to the literature review and statistical data set. Additionally, a number of books, websites, journal articles, magazines, research reports, and conference papers were reviewed and obtained for the literature review. All searches were carried out personally or electronically via the Sterling C. Evans Library at Texas A&M University, the Lone Star College- Cy Fair library, Barnes & Noble bookstore, and various library systems accessed through interlibrary loan services.

Selection Criteria

Inclusion criteria for selected studies met the following criteria:

- Conducted in the United States and published in English language journals
- Average age for inclusion of subjects was 30 and under
- Studies included African American males
- Studies involved comparison groups
- Studies reported quantitative data that could be computed as an effect size

Characteristics of Acquired Studies

Results of the search described above yielded 124 articles that were reviewed for selection. Of the selected articles, seven included more than one comparison study. These were separately analyzed and referred to as a unit of analysis. Consequently, 48 units of analysis were obtained from 25 studies. Several of the originally obtained studies did not contain sufficient statistical data to compute for meta-analysis. Many studies reported descriptive information from national and state mortality databases that included rates of suicide among African Americans. These studies were helpful in

showing changes and patterns of suicide rates over the years, but did not always provide relevant data pertaining to factors such as age, sex, and race. Other obtained studies that were not included in the analysis compared European American and non-European American groups. Because these studies included all ethnic minorities in the non-European American comparison group, total numbers of African Americans could not be identified. Other un-usable studies contained African American males and females as one comparison group and did not provide data to identify total numbers for each gender. Although these studies were not included in the meta-analysis, they contributed to background information included in the literature review pertaining to the effect of certain factors on suicidal behaviors among African Americans as a group. Of the remaining 48 studies collected, individual effect sizes were calculated. The articles included in the present study are cited in Appendix A.

Analysis

Although several scholars have outlined methods to conduct a meta-analysis, the most commonly used and widely accepted procedures were developed by Glass (1977) and by Hunter and Smith (1990). While there are many similarities across these models, the latter method is more complex and includes corrections for the effects of several artifacts including sampling error, unreliability of measurement, and range restriction (Guzzo, Jackson, & Katzell, 1987). The present study employs aspects of both methods. The following steps were taken in the current analysis:

1.) Dependent and independent variables of interest were selected and defined.
2.) Characteristics of pre-selected studies were coded
3.) Effect size estimates were calculated for each independent-dependent variable pair of interest.
4.) The mean effect size across studies was calculated.
5.) Amount of effect size variance was obtained.
6.) Effect size estimates on study characteristics were determined

Categorization of the Dependent Variable

The present study identifies the dependent variable as suicidal behavior. Suicidal behavior was determined as either suicidal or non-suicidal, based on classification of groups. Completed suicide, suicidal ideation, and suicide attempt are all classified as suicidal behavior. One study identified groups based on "suicidal acts" and "suicidal thoughts." For purposes of this meta-analysis, suicidal acts were included in the category of suicide attempt and suicidal thoughts were included in the category of suicidal ideation.

One analysis was conducted based on the broad categorization of suicidal behavior to identify prevalent factors. Additional analyses separated categories of completion, ideation, and attempt to identify any differences in factors among these groups. Finally, an analysis that combined ideation and attempts was conducted to account for studies that did not separate these two groups.

Several measures were used to determine suicidal behavior in the primary studies obtained for the current meta-analysis. 12 studies assessed suicidality by conducting interviews in which specific questions were posed related to suicidal thoughts and behaviors. Six studies determined suicidal behaviors by reviewing national or state mortality databases to examine death certificates of suicide decedents. Additionally, seven studies used standardized suicidal behavioral questionnaires including the Suicide Acceptability Scale (SAS), the Suicide Intent Scale (SIS), the Scale for Suicide Ideation (SSI), the Suicide Assessment Questionnaire, and the Suicide Experience Questionnaire (SEQ).

Coding of the Independent Variable

To identify independent variables, all factors analyzed in each obtained study were listed after an initial review of each article. This initial perusal yielded a total of 57 factors that are listed and defined in Table 1. A second review of these 57 factors identified many similarities among variables and resulted in the classification of 16 separate constructs. These constructs are listed as risk factor categories in Table 2 and include the following variables: substance use, religion, economic, location, education, family, internalizing, externalizing, ethnic variables, stressor/ conflict, support, medical/somatic, psychological disorder, perception, age, and gender. Several of these categories are not mutually exclusive and include individual factors loading on more than one construct. For example, the factor labeled as "father support" is coded under the "family" construct as well as the "support" construct. A total of four individual risk factors (family support, father support, disruptive disorder, and anxiety disorder) were coded under more than one construct.

Methods employed by primary study authors to determine each independent variable (risk factor) were similar to methods used to determine the dependent variable. Refer to Table 3 for a complete list of measures.

TABLE 1
Complete List of Individual Factors from Obtained Studies

Depression	Study identified depression as a risk factor as measured by standardized scales, questionnaires, and interviews.
Drug use	Study identified drug use as a factor but did not specify type of drug used, level of dependency, or abuse.
Alcohol use	Study identified alcohol use as a factor and did not state level of dependency or abuse.
Hopelessness	Study identified hopelessness as a factor as measured by standardized scales, questionnaires and interviews.
Loss of loved one	Includes death of close family member or friend.
Bipolar disorder	Study identified bipolar disorder as a factor as assessed by diagnostic interviews.
Panic disorder	Study identified panic disorder as a factor as assessed by diagnostic interviews.
Obsessive compulsive disorder	Study identified OCD as a factor as assessed by diagnostic interviews.
Post traumatic stress disorder	Study identified PTSD as a factor as assessed by diagnostic interviews.
Oppositional defiant disorder	Study identified ODD as a factor as assessed by diagnostic interviews.
Conduct disorder	Study identified CD as a factor as assessed by diagnostic interviews.
Attention deficit hyperactivity disorder	Study identified ADHD as a factor as assessed by diagnostic interviews.
Family support	Study identified family support as a factor as measured by standardized scales, questionnaires, and interviews.
Religious beliefs	Includes religious affiliation and association.
Locus of control	Study identified locus of control as a factor as measured standardized scales and questionnaires.
Criminal justice involvement	Includes past or present criminal conviction, incarceration, and/or serving probation or parole.
Acculturation	Levels of acculturation to mainstream American culture were measured by standardized scales.
Social support	Studies identified social support as a factor as measured by standardized scales.
Age	Includes age of subject as assessed by demographic questionnaires and mortality databases. Studies reported age by different statistics such as mean, median, and range.
Gender	Includes gender of subject as assessed by demographic questionnaires and mortality databases.
Education	Study identified education of subject as a factor as measured by demographic questionnaires, mortality databases, and interviews.
Marital status	Study identified marital status as a factor as measured by demographic questionnaires, interviews, and mortality databases. Status included single, married, widowed, separated, and divorced.
Aggression/violence	Study identified aggression and/or violence as a factor as assessed by standardized measures and questionnaires.
Homelessness	Study identified homeless status by demographic questionnaires.
Income level	Study identified income as measured by demographic questionnaires and interviews.

TABLE 1
Continued

Employment status	Study measured employment status by demographic questionnaires, interviews, and databases. Employment status was a dichotomous variable in each study (currently employed/ not employed).
Geographic location	Studies identified geographic location as a factor as measured by demographic questionnaire, interviews, and data derived from databases (locations included: Northeast, Midwest, South, West).
Attraction to death	Attraction to death was measured by interviews and questionnaires including items pertaining to wishes or desires to die, fascination with death, and wanting death to come quickly.
Anxiety disorder	Studies identified past and present occurrence of anxiety disorder as a factor as measured by standardized scales and interviews.
Antisocial disorder	Studies identified past and present occurrence of antisocial disorder as a factor as measured by standardized scales and interviews.
Disruptive disorder	Studies identified past and present occurrence of any disruptive disorder as a factor as measured by standardized scales and interviews. This factor includes disruptive disorder but does not specify type.
Any substance disorder	Study identified substance disorder as a factor but did not specify type.
Somatic problems	Study identified somatic problems as measured by interviews and questionnaires. Somatic problems included eating problems, sleep problems, somatic concerns/hypochondriasis, and other physical symptoms.
Antisocial behavior	Study identified antisocial behavior as measured by questionnaires and interviews. Antisocial behavior included violent threats, destruction of property, and community complaints.
Hostility	Study identified hostility as a factor as measured by frequency with which adolescents had various symptoms of anger or aggression.
Isolation	Study identified isolation as a factor as measured by standardized scales. Isolation includes measures of social isolation, alienation, powerlessness, and normlessness.
Number of moves/ mobility	Study identified mobility as a factor as measured by demographic questionnaires and interviews. Mobility included number of family and/or individual moves over a certain period of time.
Cocaine use	Study identified cocaine use a factor as measured by interviews, questionnaires, and autopsy reports of suicide decedents.
Marijuana use	Study identified marijuana use a factor as measured by interviews, questionnaires, and autopsy reports of suicide decedents.
Church attendance	Study identified church attendance as measured by questionnaires and interviews.
Racial segregation	Study identified racial segregation as measured by census data and other national databases.
Father support	Studies identified father support as a factor as measured by questionnaires and interviews.
Offspring	Study identified parental status of subjects by demographic questionnaires and interview. Offspring was measured by number of children or by dichotomous variable (children/ no children).
Prior hospitalization/ treatment	Study identified prior psychiatric hospitalizations or substance abuse treatment facility admissions by subject based on demographic questionnaires and interviews.

TABLE 1
Continued

Currently taking medication	Study identified if subjects were currently taking prescription medication based on questionnaires and interviews. This factor does not include illegal drugs or prescription medication that is being abused or misused.
Suicide acceptability	Study identified suicide acceptability as a factor as measured by standardized scales.
Religious well being	Study identified religious well being as a factor as measured by standardized scales and questionnaires.
Externalizing symptoms	Study identified externalizing symptoms as a factor as measured by standardized scales and questionnaires. Externalizing symptoms included measures of anger, belligerence, antisocial acts and attitudes, assaultive acts, hyperactivity, and agitation
Internalizing symptoms	Study identified internalizing symptoms as a factor as measured by standardized scales and questionnaires. Internalizing symptoms included measures of anxiety, dependency, depressed mood, social withdrawal, and isolation.
Psychotic symptoms	Study identified psychotic symptoms as a factor as measured by standardized scales and questionnaires. Psychotic symptoms included measures of blank affect, delusions, disorientation, grandiosity, hallucinations, inappropriate affect, incoherence, and paranoia.
Black social integration	Black social integration was identified as a factor and measured by data derived from census and national databases. Black social integration was comprised of measures of unemployment, poverty, inequality, and disadvantage.
Stimulant drug use	Study identified stimulant drug use as a factor as measured by questionnaires and interviews. Study did not specify type or level of dependency.
Assault behaviors	Study identified assault behaviors as measured by self reports. Assault behaviors included carrying a weapon, being in a gang fight, threatening someone, hurting someone, and hitting a teacher.
Family involvement	Study identified family involvement as a factor as measured by items pertaining to going somewhere for entertainment with family, playing games, doing things around the house, working on homework, and going to church.
Racial disparity	Study identified disparities in graduation rate, income, poverty, and unemployment among African American and European American males as a factor
Suicidal ideation	Study identified suicidal ideation as a factor as measured by questionnaires.
Reasons for living	Study identified reasons for living as measured by standardized inventories. Reasons for living included measures of subjects' potential reasons for not completing suicide.

TABLE 2
Classification of Independent Risk Factors into Categories

Variable Name	Variable	Factors
SU	Substance Use	Drug use, alcohol use, cocaine use, marijuana use, stimulant drug use, any substance disorder, prior psychiatric hospitalization/ drug treatment
REL	Religion	Religious beliefs, church attendance, religious well-being
ECO	Economic	Employment status, income level
LOC	Location	Geographic location, homelessness, mobility
FAM	Family	Family problems, family support, marital status, father support, offspring, family involvement
EDU	Education	Education
INT	Internalizing	Internalizing symptoms, depression, hopelessness, isolation, anxiety disorder
EXT	Externalizing	Externalizing symptoms, aggression, violence, disruptive disorder, hostility, assault behaviors
ETH	Ethnic variables	Acculturation, racial segregation, Black social integration, racial disparity
STR	Stressor/conflict	Loss of loved one, criminal justice involvement
SUP	Support	Family support, social support, father support
MED	Medical/ health	Somatic problems, currently taking medication
PSY	Psychological disorder/ behaviors	Anxiety disorder, antisocial disorder, disruptive disorder, antisocial behavior, psychotic symptoms, prior psychiatric hospitalization/ drug treatment, panic disorder, ADHD, OCD, ODD, CD, PTSD
PER	Perception	Suicide acceptability, suicidal ideation, attraction to death, reasons for living, locus of control
GEN	Gender	Gender
AGE	Age	Age

TABLE 3
Method to Determine Risk Factors

Type of Measurement	Frequency of use
Interview	11
Beck Depression Inventory	5
Spiritual Well Being Scale	3
Hopelessness Scale for Children	2
Reynolds Adolescent Depression Scale	2
Religious Coping Scale	2
Mortality files	2
Census data	2
Other objective measures (includes questionnaires created by study authors and standardized measures occurring once across studies)	29

Calculation of Effect Sizes

As mentioned above, the present study employs the use of Cohen's *d* statistic in expressing the differences found between the suicidal and non-suicidal group. Cohen's *d* can be derived from several different formulas, depending upon the type of design and information provided in each study. In the present study, effect sizes were calculated from means and standard deviations, correlations, chi square, t statistics, and beta weights as is standard in meta-analysis of *d* values. Formulas used to convert study statistics to *d* values are listed as follows (Dunst, Hamby, & Trivette, 2004; Glass, 1977; Wolf, 1986):

$d = (M_1 - M_2) / SD_p$

$d = 2r / \sqrt{1 - r^2}$

$d = \sqrt{(4\chi^2) / (N - \chi^2)}$

$d = 2t / \sqrt{n - 1}$

$d = \sqrt{[(N-2)\, r^2 / (1 - r^2)]} \times \sqrt{\{2\, [1 / (N/2)]\}}$

Number of Subjects

The total number of combined subjects in the acquired studies was 37,927. Of that total, African American males represented 21,533 subjects. The control group was inflated as a result of several studies using a non-suicidal control group to compare more than one suicidal group. For instance, a single control group of non-suicidal individuals would be compared to groups of ideators as well as attempters.

Reliability

Well conducted meta-analytic studies should include reliability checks to ensure consistency in coding of factors and categories (Hunter & Schmidt, 1990; Rosenthal, 1991). Inter-rater reliability was established in the present study by two observers coding the categorical study characteristics together. This occurred when the study author met with a psychology student recruited from a local university to code variables such as sample size, author affiliation, journal type, risk factor, etc. Because coding of the categorical data occurred simultaneously across the two observers, discrepancies in judgment were discussed and observers reached agreements regarding all variables. As a result, inter-rater reliability was 100% between observers. An additional observer was recruited by the study author from the statistics department at a local university to assist with coding of effect sizes for continuous variables. Meetings were held to review study characteristics and calculate effect sizes using appropriate formulas. The use of electronic effect size calculators were also used to convert study statistics to Cohen's *d*. Reliability was also 100% across raters on coding of effect sizes. Although simultaneous coding may present limitations in regard to the consistency of classifying data, a validity protocol can be used to reduce potential error caused by pressure and/or unclear judgment (Hunter & Schmidt, 1990). Appendix B contains the coding protocol used in the present study.

CHAPTER IV

RESULTS

Descriptive Analysis of Study Characteristics

The present study consisted of 48 units of analysis derived from 25 studies published between 1970 and 2007 that met inclusion criteria. The present study also included a total of 37,927 subjects of which 21,533 were African American males. The mean age of African American males in the total study was 20.7.

Studies were obtained from several articles published across four decades in different types of journals. Of the studies, 11% were published in the 1970s, 4% were published in the 1980s, 15% were published in the 1990s, and 70% were published since 2000. First authors in each study were affiliated with universities with the exception of one author, who was affiliated with a medical center. Of the 25 acquired studies, eight (32%) were published in suicidology journals such as *Suicide and Life Threatening Behavior.* Six studies (24%) were published in psychiatry journals, five (20%) were published in psychology journals, and 3 (12%) were published in sociology journals. One study (4%) was published in a medical journal, one (4%) in a mortality journal, and one study (4%) was published in a book. Settings in which studies were conducted included schools (33%) as well as hospitals (26%). Several studies (37%) analyzed data from national and state databases, and one study was conducted in various community settings.

Although most studies reported information regarding geographic location of study participants, consistent information was not provided across studies that allowed

an analysis to determine whether effect of risk factors differed based on study location. This analysis was not conducted because some studies reported only regional location (i.e Eastcoast, Southeast, Midwest) while others reported only neighborhood demographics such as urban or rural. Moreover, 17 of the 48 studies utilized data derived from national and state databases which included all geographic locations. Although an analysis of study location was not conducted, several studies examined factors related to location. Thus a risk factor category was created entitled "location" which included geographic location, homelessness, and mobility (refer to Table 1 and 2). These factors were grouped into one category because of the low number of studies that examined each factor separately. Grouping of these variables was also valid because they each relate to environmental circumstances associated with daily living.

As aforementioned, the studies utilized in the current meta-analysis employed several different types of measures and instruments in identifying independent and dependent variables. The most frequently used methods were standardized measures and objective questionnaires. Interviews were the most common method by which study authors assessed levels of suicidality as well as risk factors. The Beck Depression Inventory was the most frequently used measure to assess risk factors across studies (see Table 3).

Of acquired studies, 44% included comparisons of African American male suicidal subgroups with African American male non-suicidal subgroups. Other analyses included 30% of the studies comparing suicidal and non-suicidal subgroups of African American and European American males, 23% comparing African American males to

African American females, and two studies comparing African American males to European American females.

Descriptive Analysis of Risk Factors

A descriptive analysis of the acquired studies demonstrates that several risk factors have been explored over the past several decades regarding suicidal behaviors among African American males. Of the 57 total factors identified across studies, depression was the most frequently researched factor with 41% occurrence. Some studies examined "internalizing symptoms" as a risk factor and included assessments of depressed mood and depressive symptoms in the category of "internalizing symptoms." As a result of this overlapping, the current analysis combined depression, internalizing symptoms, hopelessness, and isolation into one risk factor category entitled "internalizing" based on the similarities in descriptions and definitions across variables that were reported in the studies. Other frequently researched factors included drug use with 27% occurrence, religion (27%), and education (25 %). Loss of a loved one and criminal justice involvement were the least researched factors, which occurred in less than one percent of studies.

Descriptive Analysis of Risk Factor Categories

Risk factor categories were determined based on similarities across individual factors and appropriateness of groupings. All categories are listed below with summaries regarding specific facets of constructs:

Substance Use

Of the 12 studies that explored risk factors related to substance use, 9 (75%) found that substance use was a significant factor in predicting suicidal behavior in African American males. Of the studies that found substance use to occur in both comparative groups, alcohol was the most common substance used by each group.

Religion

Of the 12 studies that analyzed religious factors, 8 (66%) found significant differences in religious factors for suicidal behaviors among African American males. Of the studies that did not find significance in religious factors, church attendance was the most common factor in both groups.

Economic

Of seven studies that explored economic variables, six (85%) found that economic factors were significant in predicting suicidal behaviors in African American males. In the study that did not indicate significance, employment status was similar among both groups.

Location

Of nine studies that identified location as a factor for suicidal behavior, five (56%) found that location factors were significant in predicting suicidal behavior among

African American males. Of those studies that did not find location factors as significant, mobility (number of moves) was similar across groups.

Family

Of 13 studies that explored family factors related to suicidal behavior, 9 (69%) indicated significance for family factors related to suicidal behavior. Marital status was the most common family factor that was not found to be significant across groups.

Education

Of 11 studies that explored education as a factor for suicidal behavior, 7 (63%) found that education was a significant factor for suicidal behavior among African American males, such that lower levels of education were more associated with suicidal groups of African American males than control groups.

Internalizing Symptoms

Of the 18 studies that explored internalizing factors, 14 (77%) found them to be significant in predicting suicidal behaviors among African American males. Hopelessness was the only internalizing factor that was not found to be significant in the remaining studies.

Externalizing Symptoms

Of 12 studies that identified externalizing factors, 11 (91%) found them to be significant risk factors associated with suicidal behaviors in African American males.

Ethnic Variables

Of five studies that explored ethnic variables, 4 (80%) indicated significant effects for suicidal behavior. In the remaining study, levels of acculturation were found to be similar across both groups.

Stressor/Conflict

Of three studies that analyzed the impact of a stressor or conflict, 2 (67%) found significance for predicting suicidal behavior in African American males. Loss of a loved one was not found to have a significant impact in the remaining study.

Support

All four studies (100%) that explored support factors found significant differences between groups, such that higher levels of family, social, and father support were associated with decreased levels of suicidal behavior among African American males.

Medical/ Health

Of 10 studies, 9 (90%) found medical factors to be significant risk factors associated with suicidal behavior among African American males. One study found no significant differences among groups regarding current use of prescribed medication.

Psychological Disorder/ Behaviors

Of 11 studies, nine (81%) indicated psychological/psychiatric disorders or behaviors to be significant risk factors for African American male suicidal behaviors. Anxiety disorder and psychotic symptoms were found to be similar across groups in the remaining two studies.

Perception

Of four studies, three (75%) found factors related to perception to be significant risk factors. Locus of control was similar across groups in the remaining study

Gender

Of four studies that explored gender, 4 (100%) indicated significance across groups, such that suicidal ideation and attempts were significantly more likely to occur among females. In studies that explored gender differences for completed suicide, results indicated that males were significantly more likely to complete suicide than females.

Age

10 of 12 (83%) studies found age to be a significant risk factor for suicidal behavior among African American males. In these studies, the age of suicidal African American males was found to be significantly younger than comparison groups.

Effect Size Analysis

To compare the individual differences in mean effect sizes for each of the 57 identified risk factors, an analysis of variance (ANOVA) was conducted. Results indicated that age (*d*= 1.99), loss of a loved one (*d*=1.39), religious well being (*d*=1.01), suicide acceptability (*d*=.96), prior hospitalization/treatment (*d*=.94), depression (*d*=.91), and obsessive compulsive disorder (*d*=.91) had the largest effects across individual factors. Factors that had the smallest individual effects were assault behaviors (*d*= .01), offspring (*d*= .06), somatic problems (*d*= .27), and homelessness (*d*= .28).

After conducting an ANOVA to compare mean effect size differences for the individual factors, effect sizes were determined for each categorization of the 16 factor constructs. Table 4 contains a complete list of studies and correlating effect sizes for each category of risk factors. The mean effect size of factors across all studies was .61 with a minimum value of .00 and a maximum value of 8.66. The single largest effect size of 8.66 was obtained from a study examining differences in age among groups of African American male attempters and European American male attempters. Results of this study found that age had a highly significant effect, such that African American male attempters were far more likely to be younger than European American male attempters. Because studies such as these produced outlying effect sizes, a basic test of homogeneity was conducted on each risk factor category to check if effect estimates were possible considering the population of studies from the specified construct. As a result of the small number of studies obtained for the current meta-analysis, confidence intervals were used as a general test of significance. All effect sizes found within a 95%

confidence interval were used to compute the mean *d* value of each construct. Outlying effect sizes were identified as *d* values that fell above or below the confidence interval, and were therefore removed from the pool of values used to calculate the mean effect sizes for each construct. By including all *d* values that fell within the expected range of effect sizes, the computed sample estimate was more than likely part of the defined population of effect size estimate (Hunter & Schmidt, 1990). Appendix C displays mean effect sizes and standard deviations of each risk factor category based on differential types of suicidal behavior. These values were determined after removing outlying effects.

Weighted and unweighted effect sizes remained similar in magnitude across subgroups of suicidal behavior. Ranges of unweighted and weighted effect sizes were as follows: unweighted effect sizes for the suicidal group ranged from .31 to 2.42 while the weighted sizes ranged from .28 to 1.38; for attempters unweighted sizes ranged from .05 to 2.42 while weighted sizes ranged from .05 to 1.38; unweighted sizes for ideators ranged from .07 to .74 while weighted effect sizes ranged from .07 to .64; for the combined group of attempters and ideators unweighted sizes ranged from .31 to 2.42 while weighted sizes ranged from .28 to 1.38; and lastly unweighted and weighted effect sizes for completers fell within the same range from .01 to 1.46.

Table 4

Studies and Effect Sizes of Risk Factors

Study	Comparison	SU	REL	ECO	LOC	FAM	EDU	INT	EXT	ETH	STR	SUP	MED	PSY	PER	GEN	AGE
Anglin et al., 2005	AAm att/AAm non	.	0.6	.	0.32	.	.	.	.	.	.	.	.	.	0.96	.	0.36
Anglin et al., 2005		.	1.01	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Bettes & Walker, 1986	AAm id/AAm non	.	.	.	.	.	.	0.9	0.42	.	.	.	0.76	0.44	.	.	.
Bettes & Walker, 1986	AAm att/AAm non	.	.	.	.	.	.	0.05	0.31	.	.	.	0.17	0.04	.	.	.
Bettes & Walker, 1986	AAm id&att/AAm non	.	.	.	.	.	.	0.49	0.42	.	.	.	0.35	0.95	.	.	.
Bettes & Walker, 1986	AAm id/AAf id	.	.	.	.	.	.	0.11	0.36	.	.	.	0.2	0	.	.	.
Bettes & Walker, 1986	AAm att/AAf att	.	.	.	.	.	.	0.25	0.53	.	.	.	0.1	0.03	.	.	.
Bettes& Walker, 1986	AAm id&att/AAf id&att	.	.	.	.	.	.	0.06	0.47	.	.	.	0.19	0.41	.	.	.
Bettes & Walker, 1986	AAm id/AAf non	.	.	.	.	.	.	0.65	0.14	.	.	.	0.51	0.48	.	.	.
Bettes & Walker, 1986	AAm att/AAf non	.	.	.	.	.	.	0.23	0.02	.	.	.	0	0.07	.	.	.
Bettes & Walker, 1986	AAm id&att/ AAf non	.	.	.	.	.	.	0.27	0.14	.	.	.	0.16	1.01	.	.	.
Burr et al, 1999	AAm com/AAm non	.	0.01	0.32	.	.	.	.	.	0.68	.	.	.	.	.	.	.
Burr et al, 1999		.	.	.	.	.	.	.	.	0.71	.	.	.	.	.	.	.
Castle et al, 2004	AAm com/AAm non	0.41	.	.	.	.	.	0.55	0.53	.	.	.	.	.	0.94	.	.
Castle et al, 2004		0.32	.	.	.	.	.	0.67	.	.	.	.	.	.	1.99	.	.
Castle et al, 2004		0.22	.	.	.	.	.	.	.	.	.	.	.	0.51	.	.	.
Compton et al, 2005	AAm att/AAm non	0.94	.	0.11	0.31	0.08	0.35	.	.	.	0.35	0.85	0.23	.	.	.	0.35
Compton et al, 2005		.	.	0.45	.	0.02	.	.	.	.	.	.	.	.	.	.	.
Garlow et al, 2007	AAm com/Wm com	0.49	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.37
Garlow et al, 2007		0.55	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Harris & Molock, 2000	AAm sui/AAm non	.	.	.	.	0.58	.	1.39	.	.	.	0.58	.	.	.	.	.
Ialongo et al, 2002	AA att/AA non	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.12	.
Ialongo et al, 2002	AAm att/AAm ide	.	.	0.34	.	.	.	.	0.46	.	.	.	.	.	.	.	.
Ialongo et al, 2002	AAm id/AAm non	0.57	.	.	.	.	.	0.94	0.57	.	.	.	.	0.29	.	.	.
Ialongo et al, 2002		.	.	.	.	.	.	0.29	.	.	.	.	.	.	.	.	.
Ialongo et al, 2002	AAm att/AAm non	0.22	.	.	.	.	.	0.89	0.71	.	.	.	.	0.05	.	.	.
Ialongo et al, 2002		.	.	.	.	.	.	0.05	.	.	.	.	.	.	.	.	.
Ialongo et al, 2004	AAm att/AAm non	.	.	.	0.49	.	.	0.46	0.07	.	.	.	.	.	.	.	.
Ialongo et al, 2004		.	.	.	.	.	.	0.19	.	.	.	.	.	.	.	.	.
Joe et al, 2007	AAm com/AAf com	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.56	.
Joe et al, 2006	AAm com/AAm non	.	.	.	0.45	0.36	0.44	0.74	.	.	.	.	.	0.7	.	.	.
Joe et al, 2006		0.86	.	.	.	.	.	0.79	.	.	.	.	.	0.79	.	.	.
Joe et al, 2006		0.95	.	.	.	.	.	.	.	.	.	.	.	0.92	.	.	.

Table 4, Continued
Studies and Effect Sizes of Risk Factors

Study	Comparison	SU	REL	ECO	LOC	FAM	EDU	INT	EXT	ETH	STR	SUP	MED	PSY	PER	GEN	AGE
Joe et al, 2006		0.9	.	.	.	.	.	.	.	.	.	.	.	0.92	.	.	.
Joe et al, 2006		1.02	.	.	.	.	.	.	.	.	.	.	.	0.98	.	.	.
Joe et al, 2006		.	.	.	.	.	.	.	.	.	.	.	.	0.5	.	.	.
Joe et al, 2006		.	.	.	.	.	.	.	.	.	.	.	.	0.88	.	.	.
Joe et al, 2006		.	.	.	.	.	.	.	.	.	.	.	.	1.01	.	.	.
Joe et al, 2006	AAm ide/AAm non	.	.	.	0.17	0.28	0.27	0.74	.	.	.	.	.	0.62	.	.	.
Joe et al, 2006		0.65	.	.	.	.	.	0.74	.	.	.	.	.	0.74	.	.	.
Joe et al, 2006		0.76	.	.	.	.	.	.	.	.	.	.	.	0.78	.	.	.
Joe et al, 2006		0.6	.	.	.	.	.	.	.	.	.	.	.	0.89	.	.	.
Joe et al, 2006		0.63	.	.	.	.	.	.	.	.	.	.	.	0.77	.	.	.
Joe et al, 2006		.	.	.	.	.	.	.	.	.	.	.	.	0.39	.	.	.
Joe et al, 2006		.	.	.	.	.	.	.	.	.	.	.	.	0.64	.	.	.
Joe et al, 2006		.	.	.	.	.	.	.	.	.	.	.	.	0.73	.	.	.
Juon & Ensminger, 1997	AAm id/AAm non	0.64	0.07	0.44	0.28	0.02	.	0.75	.	.	.	.	.	.	.	.	.
Juon & Ensminger, 1997		0.61	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Juon & Ensminger, 1997	AAm att/AAm non	1.17	0.35	1.51	0.7	1.24	.	1.82	.	.	.	.	.	.	.	.	.
Juon & Ensminger, 1997		0.79	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Juon & Ensminger, 1997	ado AAm id/ado AAm non	0.11	.	.	0.47	0.21	.	0.13	0.17	.	.	.	.	.	.	.	.
Juon & Ensminger, 1997		0	.	.	.	.	.	.	0	.	.	.	.	.	.	.	.
Juon & Ensminger, 1997	adol AAm att/ado AAm non	0.59	.	.	0.78	0.23	.	0.19	0.12	.	.	.	.	.	.	.	.
Juon & Ensminger, 1997		0.37	.	.	.	.	.	.	0.02	.	.	.	.	.	.	.	.
Kaslow et al, 2004	AAm att/AAm non	0.43	0.39	.	0.31	0.1	.	1.62	1.26	.	.	.	.	.	.	.	0.38
Kaslow et al, 2004		0.25	1.02	.	.	.	.	1.57	0.64	0.74	.	.	.	.	.	.	.
Kaslow et al, 2004		.	.	.	.	.	.	.	.	0.85	.	.	.	.	.	.	.
Kirk & Zucker, 1976	AAm att/AAm non	.	.	.	.	.	.	0.27	.	0.73	.	.	.	.	.	.	.
Kirk & Zucker, 1976		.	.	.	.	.	.	1.09	.	.	.	.	.	.	.	.	.
Kirk & Zucker, 1976		.	.	.	.	.	.	0.06	.	.	.	.	.	.	.	.	.
Kubrin et al, 2006	AAm com/AAm non	.	.	0.28	0.61	.	.	.	.	0.06	.	.	.	.	.	.	.
Kubrin et al, 2006		.	.	.	0.42	.	.	.	.	.	.	.	.	.	.	.	.
Lester, 1990	AAm com/AAm non	.	.	0.18	.	.	0.75	.	.	.	.	.	.	.	.	.	.
Lester, 1990		.	.	0.68	.	.	.	.	.	.	.	.	.	.	.	.	.
Molock et al, 1994	AA ide/AA non	.	.	.	.	.	.	1.32	.	.	.	.	.	.	.	0.44	.
Molock et al, 2006	AA ide/ AA non	.	.	.	.	.	.	0.09	.	.	.	.	.	.	.	0.71	.
Molock et al, 2006		.	.	0.64	.	.	.	0.38	.	.	.	.	.	.	0.28	.	.

Table 4, Continued
Studies and Effect Sizes of Risk Factors

Study	Comparison	SU	REL	ECO	LOC	FAM	EDU	INT	EXT	ETH	STR	SUP	MED	PSY	PER	GEN	AGE
Spann et al, 2006	AAm sui/AAf sui	.	0.19	.	.	.	.	0.09	.	.	.	.	.	.	0.12	.	.
Spann et al, 2006		.	.	.	.	.	.	0.49	.	.	.	.	.	.	.	.	.
Stein et al, 1974	AAm att/Wm att	.	0.59	.	.	0.51	0.68	.	.	.	.	.	.	.	.	.	0.49
Stein et al, 1974	AAm att/AAm non	.	.	0	.	0	0.06	.	.	.	.	.	.	.	.	.	0.12
Stein et al, 1974	AAm att/AAf att	.	0.44	.	.	0.7	1.32	.	.	.	.	.	.	.	.	.	1.15
Stein et al, 1974	AAm att/AAf non	.	0.47	.	.	0.79	0.59	.	.	.	.	.	.	.	.	.	2.09
Stein et al, 1974	AAm att/ Wm non	.	0.55	.	.	0.49	1.19	.	.	.	.	.	.	.	.	.	8.66
Stein et al, 1974	AAm att/ Wf att	.	0.59	.	.	0.76	0.71	.	.	.	.	.	.	.	.	.	4.57
Stein et al, 1974	AAm att/ Wf non	.	0.62	.	.	0.73	1.19	.	.	.	.	.	.	.	.	.	5
Tarver et al, 2004	AAm ide/AAm non	0.37	.	.	.	0.28	.	1.42	.	.	.	0.28	.	.	.	.	.
Walker et al, 2005	AAm att/AAm non	.	.	.	.	.	.	.	.	0.26	.	.	.	.	.	.	.
Walker et al, 2005	AAm ide/AAm non	.	.	.	.	.	.	.	.	0.3	.	.	.	.	.	.	.
Watt & Sharp, 2002	AAm att/AAm non	.	.	.	.	0.98	0.72	.	.	.	.	0.98	.	.	.	.	.
Willis et al, 2003	AAm com/Wm com	0.33	.	.	0.47	0.49	0.23	.	.	.	.	.	0.25	.	.	.	0.42
Willis et al, 2003		0.31	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Willis et al, 2003		0.84	.	.	.	.	.	.	0.59	.	0.79	.	.	0.43	.	.	.
Wingate et al, 2005	AAm sui/Wm sui	.	0.47	.	0.35	.	.	.	.	.	.	0.14	.	.	.	.	.

Analysis of Research Questions

1. *What are consistent risk factors associated with suicidal behaviors within ideators, attempters, completers, and combined groups?*

Results of effect size analyses of factors that differentiated suicidal and non suicidal groups revealed several consistencies. Age, factors related to perception (d>.8), and internalizing factors (d>.5) yielded the largest effects for the combined suicidal group. Specifically, suicidal African American males were found to be much younger than control groups of non-suicidal individuals, held different perceptions, and experienced more internalizing symptoms.

When examining subgroups separately, risk factors yielding the greatest effect for attempters were age, perception, support (d>.8), and ethnic variables (d>.5). For ideators, medium effects were found for substance use, medical variables, psychological disorders, gender, internalizing factors, and economic status (d>.5). When examining the combined group of ideators and attempters, large effects were found for age, perception, support, internalizing, religion, and substance use (d>.8). For completers only, perception and psychological disorders (d>.8) had the greatest effects for completed suicide across all factors.

2. *Which risk factors are consistent for suicidal behaviors among subgroups of African American males?*

The current meta-analysis produced a limited number of eligible studies which prevented the execution of some analysis. Additionally, demographic information and descriptive characteristics of study participants was not consistent across all included

studies. Therefore subgroup analysis of African American males was limited to a comparison of mean sample age, publication year, and study setting.

To compare factor effects across age of study participants, a descriptive analysis was conducted to determine mean differences of factors among studies that included a sample of participants whose mean or median age was under 20 and an analysis for those studies that included mean or median sample ages of 20 or older. The results of these two analyses indicated that several categories of factors had small to medium effects on suicidal behaviors. However, differences in magnitudes of effects across the two groups were found in education, internalizing, externalizing, psychological, and perception variables. Education (*d*=.81, .41) and age (*d*=2.80, .37) had greater effects on suicide in the younger group than in the older group. On the other hand, internalizing (*d*=.87, .47), externalizing (*d*=.75, .29), psychological (*d*=.73, .34), and perception (*d*=1.29, .20) had greater effects in the older group.

Descriptive analyses were also conducted to determine if the year of the study had any effect on the size of factor effects. To perform this analysis, studies published between 1970 and 1999 were compared to those published since 2000. Results indicated that education (*d*=.81, .40), ethnic variables (*d*=.71, .44), and age (*d*=3.10, .37) had larger effects in earlier studies than they did in later studies. Conversely, internalizing (*d*=.71, .50), externalizing (*d*=.61, .24), and psychological (*d*=.67, .38) factors had greater effects in more recent studies.

To determine if factor effects differed for subgroups based on study setting, descriptive analyses were conducted for those studies that were set in hospitals

compared to those set in schools. Education (*d*=.76, .72) had greater effects than other factor categories for both the hospital and school subgroup. Other factors that had large effects on the hospital subgroup was perception (*d*=.96) and support (*d*=.85). Religion (*d*=.63, .20) was a category that had a greater effect in the hospital group than the school group. Conversely, economic factors (*d*=.73, .21) had a greater effect on suicide for those individuals studied in a school setting.

3. Do effect sizes differ based on type of risk factor (ie. individual vs. societal/environmental factor)?

When examining types of risk factors, differences were observed among categories. Mental health factors (such as psychological disorders and internalizing symptoms) had greater effects on suicidal behaviors than demographic factors (such as economic status and location). Also, self destructive factors such as substance use and externalizing behaviors (violence, aggression, etc.) had smaller effects than supportive factors such as religion and support. Refer to Appendix B for effect sizes of each factor.

4. What theoretical explanation, if any, adequately explains the increase in young African American male suicide over the past few decades?

Several theoretical explanations have been proposed by researchers to explain the increase in suicide rates of African American males over the past few decades. Although these theories are rooted in various disciplines, many consistencies exist across theoretical perspectives. Sociological (i.e. Durkheim, Beck), psychological (i.e. Freud, Adler), cultural, and economic theories all contain overlapping themes related to some form of support. Although the results of the current meta-analysis can be explained (to

some degree) by many theories, a socio-cultural framework appears to offer the most fitting rationalizations.

The risk society introduced by Beck offers an interesting outlook to view the current findings. Beck (1992) describes pre-modern societies as generally traditional societies in which individuals defined themselves primarily as part of a larger group and found meaning and purpose in institutions and structures such as church, extended family, and community. Although Beck discussed social life in Europe and North America, traditional African and African American cultures are embedded in foundations of collectivism and community values as well (Akbar, 1991; Nobles, 1991). Beck further explained that traditional societies became threatened by individual freedom and autonomy. The consequent early modernity societies shifted focus from traditional structures shaping and providing meaning to life, to individuals choosing to be loyal to structures for personal gain. With this transitional pattern of societal transition in mind, more recent views in regard to cultural values are explored.

Some scholars have attributed the increase in rates of African American male suicide to acculturation, insinuating that as more African American males began to embrace the values and beliefs of the mainstream (European American) culture, they became more at risk for suicidal behaviors (Davis, 1980; Gibbs, 1997; Group for the Advancement of Psychiatry, 1989, Walker, 2007). This idea was predicted several decades ago when Prudhomme (1938) stated that “as the [African American] environment approximates that of the majority, the suicide rate becomes higher” (p.391). In the present study, results of an ANOVA indicated that the individual factor of

acculturation produced an overall medium effect (*d*=.51) on suicidal behavior. Likewise, a descriptive analysis indicated that ethnic factors (which included acculturation, social integration, racial segregation, and racial disparity) also yielded a medium effect on suicidal behavior within young African American males (*d*=.63). These results (examined alone) do not validate the argument that acculturation has led to increased suicide rates for African American males. However, when an analysis was conducted comparing studies across time, results indicated that earlier studies (1970-1999) found ethnic variables to have a larger effect (*d*=.71) on suicidal behaviors than studies conducted more recently (*d*=.44). Perhaps one explanation for this finding can be made by understanding the societal changes throughout the past few decades.

After the Civil Rights Movement in the late 1960s and early 1970s, African Americans were allotted more privileges and opportunities that they did not have in previous years. During this time, many state and federal laws were passed to give individuals of African descent (as a collective group) many of the same rights and freedoms had by majority groups (particularly Americans of European descent). As African Americans began to have increased access to better jobs, education, and economic status, it can be argued that acculturation levels also increased during that time. As indicated by the results of the present meta-analysis, the higher effect of ethnic variables on suicide in earlier studies may be related to the higher levels of acculturation (and associated acculturative stress) at that time. Traditional protective factors (i.e. religious beliefs and extended family networks) embedded in the cultures of African slaves and their early descendants began to weaken as African Americans received more

rights. The need to hold on to customary traditions, beliefs, and practices that provided support during times of blatant racism and injustices became diminished. This explanation is further upheld by the findings in the current study that indicated religion and family factors did not have large effects (*d*=.49, .38 respectively) on suicidal behavior. As aforementioned in Chapter II, these factors have been historically identified as being critical in the culture and lifestyle of African Americans and have been found to serve as buffers against outcomes such as suicide. As African Americans have become more acculturated the impact of these factors (compared to others) has become less significant.

As suggested in Beck's theory, the modern society has become more individualized and focused on the self as the primary agent of meaning as opposed to finding meaning in institutions such as church and family. With this in mind, it is not implausible to conclude that African American males are not as influenced by family and religion as acculturation has increased. The large inverse effect of age can also be explained along these lines. Younger individuals are less likely to embrace traditional cultural values to the same degree as their parents and grandparents. This finding has been consistent across research exploring cultural ties in several ethnic groups such as Mexican Americans, Asian Americans, and African Americans (Choi et al., 2008; Phinney et al., 2000). Therefore the finding that suicidal behavior was greatly affected by young age and only moderately affected by religion, family, and ethnic variables is explicable.

The finding that externalizing behaviors (*d*=.40) did not have a large effect may be explained with reference to "the code of the streets" as described by Anderson (1999). He described the street code as a subculture that is directly and/or indirectly forced upon many African American males living in poor inner-city environments. In this street culture, externalizing behaviors such as violence and aggression are accepted and are often necessary for survival. These behaviors have been adapted largely as a response to the lack of faith in police as well as the distrust in the judicial system. The negative judicial outcomes for African American males (as mentioned in previous chapters) may lead to a belief that they cannot rely on other means for protection and safety. Therefore, they must take care of and protect themselves which may require violent and aggressive means. Because this subculture exists for many African American males, these externalizing behaviors may be more accepted in this population as compared to other groups. Thus, the effect of these behaviors on suicide is not large because the engagement in these behaviors among African American males may not necessarily imply any type of maladjustment.

CHAPTER V

SUMMARY AND DISCUSSION

Summary Statement

The results of the present study indicate that all 16 risk factor constructs differentiated suicidal African American males from non-suicidal groups with at least a small effect. The age of African American males was found to have the largest effect on suicidal behavior such that suicidal African American males were more likely to be younger than non-suicidal comparison groups. Compared to other factors, family, location, and externalizing behaviors yielded consistent low to medium effects across all subgroups of suicidal behaviors. These factors appeared to generally have similar levels of effects regardless of which type of suicidal behavior was investigated. A few unexpected findings occurred. Substance use and externalizing factors yielded small to medium effects across types of suicidal behavior. Family and religion factors did not yield large effects across suicidal behaviors. Although these finding were unexpected, theories rooted in sociological and cultural foundations offer probable explanations for these results. Characteristics of risk factors within suicidal subgroups are summarized below.

Attempters

Age had the largest pooled effect size of all factors for African American male suicide attempters, followed by perception and support. Younger males and those with accepting perceptions of suicide, death, and external locus of control are more likely to attempt suicide. The negative direction of the support effect indicate that young African

American males with high levels of family, social, and father support are less likely to attempt suicide. Interestingly, psychological disorders had the smallest effect for suicide attempters. This suggests that individuals with psychological disorders were no more likely to attempt suicide than those without a disorder. Although a non-significant effect was found for psychological disorder in the attempter group, greater effects (*d*= .59, .58, .57, .79) were found in the groups of combined suicidal, ideators, ideators & attempters, and completers respectively.

Ideators

Medical symptoms (including somatic problems) as well as substance use had the greatest effect magnitudes for the group of ideators. This finding suggests that African American males who have suicidal thoughts are more likely to use and/or abuse substances and are more likely to have medical problems compared to non-suicidal groups. Perhaps adverse physical symptoms related to medical concerns lead to thoughts of taking one's life for some individuals, because this factor was not found to have a large effect in any other suicidal group. Religion had the smallest effect on ideators (*d*=.07) suggesting that it did not differentiate African American males who endorsed having suicidal thoughts from those who did not.

Ideators & Attempters Combined

Support yielded the largest effect magnitude for the combined group of ideators and attempters in that as levels of support increased, suicidal ideation and attempt decreased. Medical factors had the smallest magnitude of effect for this group.

Completers

Perception had the greatest effect for African American male suicide completers followed by psychological disorders, internalizing factors, and substance use. This finding is consistent with results of previous studies that indicate these factors to be associated suicidal behavior (Brent et al., 1988; Brown, 1997; Caldwell & Gottesman, 1990; Dougherty, 2007; Marttunen et al., 1995).

Discussion

When considering the current study, speculations may arise in regard to the conceptualization of the findings. Young African American males currently exist in a society that offers divergent opportunities and outcomes. On one hand, African American men have more rights now to jobs, education, and economic freedoms more than they ever had in times past. The opportunity to excel professionally has been accepted by African American men in a range of different areas such as business, industry, athletics, art, entertainment, etc. This has contributed to the progression of distinct subclasses based on economic levels. As the country has become more diverse over time and more civil rights have been allotted to all people, African American males are becoming more unique and stereotypical generalizations are becoming less accurate because of the range of within-group differences. However, African American males (in general) often continue to be perceived negatively regardless of their status or individual character. Negative assessments are made because of factors such as media portrayals, criminal injustices, and prejudice. These misperceptions may create a sense of inadequacy about an individual's group of belonging and about future outcomes, which

may lead to an increased likelihood of being adversely affected by many of the risk factors identified in the present study.

Limitations

The small number of obtained studies presented a great limitation in the current meta-analysis. As in primary studies, the larger the overall sample size the greater the likelihood that results obtained are more like the general population of interest. As a result of the limited number of studies and subjects in the present analysis, results should be interpreted with caution.

Other limitations include primary study characteristics that may have been flawed or contain inadequacies. Instruments and measures used to assess independent variables as well as suicidal behavior may have contained inadequate psychometric properties, particularly unstandardized measures and interviews created by study authors. Also, the measurement of risk factors among studies differed as a result of differences in measures and definitions of factors. Although attempts were made to group factors into appropriate categories based on primary study descriptions, construct validity issues may have been a concern.

The definition of race in obtained studies presents a limitation because consistency across study authors was not demonstrated in regard to definition of groups. Most studies indicated that samples included “African Americans” or “Blacks” as identified by self-reported demographic interviews and/or questionnaires. This can produce inconsistencies because individuals may self-report their race and/or ethnicity differently. Also, bi-racial and multi-racial individuals may classify themselves into one

racial group. Moreover, some studies use the term “Black” in demographic measures to refer to ethnicity, not race. For purposes of the current meta-analysis, all study participants classified as “Black” and/or as “African American” were included in the comparison group of African American. In one study (Walker et al., 2005) samples included African Americans, Caribbean Americans, and Black Latinos whom were identified as being of African descent. In the current study, all of these individuals were included in the “African American” comparison group because the definition of the term in this study involved ethnicity, not nationality.

The classification of suicide is another limitation that should not be overlooked. As mentioned in previous chapters, the mislabeling of some suicides as accidental and/or as homicidal deaths may often occur due to some form of error. Random error will always potentially be involved when classifying deaths because of the inability to obtain information from the primary subject in question. Therefore, reliance must be based on other individuals and/or on information obtained from environmental sources (i.e. psychological autopsies). Systematic error may also result in the mislabeling of suicide, such as was mentioned in previous chapters regarding pressures due to personnel and policy changes in the departments that classify deaths. As a result, there is no way to accurately determine if every death is labeled appropriately. In the current analysis, several primary study authors used data obtained from national and state mortality databases to examine risk factors. This presents as limitation because of the potential inaccuracies in the labeling of these deaths.

Implications for Future Research and Practice

Given the low inclusion of African American males in research studies exploring suicidal behaviors, a more concerted effort should be made by researchers to study this population. As aforementioned, the numbers of current primary studies that have included samples of African American males are limited. A review of previous literature demonstrates this group is far more understudied than other groups. Consequently, findings from studies with limited or no inclusion of African American males cannot accurately be generalized to that population. Therefore, in order to gain a better understanding of African American male suicide, more research must be conducted with their inclusion. With this in mind, future research should include exclusive samples of African American males as primary subjects of studies or in comparison with other groups, instead of categorizing them in groups with African American females and/or other ethnic minorities.

Researchers should also be cautious when interpreting results from studies involving suicide among young African American males. Like any group, African American males share experiences that are unique from other groups. As mentioned in previous sections, differences in cultural and societal views and outcomes have been found to occur within this population. For this reason, future research results should be interpreted from the African American male perspective and not from the perspective of other populations (i.e. European American males, European American females, African American females, etc.). With this in mind, it would be beneficial to see more research conducted that specifically examines the homicide/suicide interaction. Although

homicide occurs among all groups, the impact of its occurrence within the young African American male population is substantial. More studies are needed that examine homicidal behaviors (i.e. ideations, attempts, completions) much like those that examine suicidal behaviors. By increasing the number of studies exploring homicide, associated factors can be accurately identified. Consequently, researchers may find that there is an overlap of factors associated with suicide as well as homicide. Prevention focused on those factors would be useful in combating suicide as well as homicide concurrently. This would also help to alleviate many of the possible suicides that are mislabeled as homicides.

Implications for practice should also include awareness on the part of educators, mental health professionals, social workers, program developers, and prevention/ intervention specialists that the risks associated with young African American male suicidal behaviors may occur for different reasons within this group than within other groups. Although the results of this study indicated that most of the risk factors identified in other more researched groups are the same risk factors for young African American males, magnitude of risk factor effects differed. Therefore, it is important to consider that one identified factor (such as substance use) may have a great effect on suicidal behavior in other groups, but may have a smaller effect (but an effect nonetheless) in African American males. This consideration will be helpful in creating intervention and prevention programs that are effective in targeting appropriate behaviors.

Because young African American males are under researched in the area of suicide, efforts should be made on the part of national and local organizations to increase the involvement of this group in research studies. This can be done by offering awareness about African American male suicide through the dissemination of information electronically (i.e. websites) and in print (i.e. journals, books, brochures). Along with providing information, research grants are other means by which scientists are encouraged to study phenomena affecting certain groups. Funding agencies have the ability to guide the direction of research by offering financial assistance. Ethnic minorities (particularly minority men) are underserved groups in regard to medical as well as mental healthcare. Because of this, funding agencies should encourage more research by providing information and grants that would subsequently lead to effective prevention and intervention programs.

REFERENCES

Adler, A. (1958). Suicide. *Journal of Individual Psychology, 14*, 57-61.

Akbar, N. (1991). The evolution of human psychology for African Americans. In R.L. Jones (Ed.) *Black psychology*, 3rd ed. Berkeley, CA: Cobb & Henry.

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders*, 4th Edition Text Revision. Washington, DC: American Psychiatric Association.

Anderson, E. (1999). *Code of the streets: Decency, violence, and the moral life of the inner city.* New York: Norton.

Andrulis, D. (1997). *The urban health penalty: New dimensions and directions in inner-city health care.* (American College of Physicians Position Paper No. 1). Washington, DC: National Public Health and Hospital Institute.

Angst, J. & Clayton, P. (1998). Personality, smoking and suicide: A prospective study. *Journal of Affective Disorders, 51,* 55-62.

Banfield, E.C. (1974). *The unheavenly city revisited*. Boston: Little, Brown.

Barnes, A. (2004). Race, schizophrenia, and admission to state psychiatric hospitals. *Administration and Policy in Mental Health, 31*(3), 241-252.

Beck, A.T., Weissman, A., Lester, D. & Trexler, L. (1974). The measurement of pessimism: The Hopelessness Scale. *Journal of Consulting and Clinical Psychology, 42,* 861-865.

Beck, U. (1992). *Risk society: Towards a new modernity*. London: Sage.

Berkowitz, L. (1993). *Aggression: Its causes, consequences, and control.* New York: Academic.

Bevis, W. (1921). Psychological traits of the southern Negro with observations as to some of his psychoses. *American Journal of Psychiatry, 1,* 69-78.

Blow, F., Zeber, J., McCarthy, J., Valenstein, M., Gillon, L., & Bingham, C. (2004). Ethnicity and diagnostic patterns in veterans with psychoses. *Social Psychiatry and Psychiatric Epidemiology, 39*(10), 841-851.

Bolland, J. (2003). Hopelessness and risk behavior among adolescents living in high-poverty inner-city neighbourhoods. *Journal of Adolescence, 26*, 143-158.

Bolland, J., Lian, B. & Formichella, C. (2005). The origins of hopelessness among inner city African Americans adolescents. *American Journal of Community Psychology, 36*(3-4), 293-305.

Brent, D., Perper, J., Goldstein, C., Kolko, D., Allan, M., Allman, C. & Zelenak, J. (1988). Risk factors for adolescent suicide: A comparison of adolescent suicide victims with suicidal inpatients. *Archives of General Psychiatry, 45,* 581-588.

Brent, D., Perper, J., Moritz, G., Allman, C., Roth, C., Schweers, J., Balac Baugher, M. (1993). Psychiatric risk factors for adolescent suicide: A case control study. *Journal of the American Academy of Child and Adolescent Psychiatry, 32,* 521-529.

Brent, D., Perper, J., Moritz, G., Baugher, M., Schweers, J., & Roth, C. (1994). Suicide in affectively ill adolescents: A case-control study. *Journal of Affective Disorders, 31,* 193-202.

Brown, C., Abe-Kim, J., & Barrio, C. (2003). Depression in ethnically diverse women: Implications for treatment in primary care settings. *Professional Psychology:*

Research and Practice, 34, 10-19.

Brown, S. (1997). Excess mortality of schizophrenia. A meta-analysis. *British Journal of Psychiatry, 171,* 502-508.

Bryant, T., Ro, M., & Rowe, R. (2003) The mental health of African American men fact sheet. *Community Voices, 4*.

Butterfield, M., Bosworth, H., Stechuchak, K., Frothingham, R., Bastain, L., Meador, K., et al. (2004). Racial differences in hepatitis B and hepatitis C and associated risk behaviors in veterans with severe mental illness. *Journal of the National Medical Association, 96*(1), 43-52.

Caldwell, C. & Gottessman, I. (1990). Schizophrenics kill themselves too: A review of risk factors for suicide. *Schizophrenia Bulletin, 16,* 571-589.

Centers for Disease Control and Prevention (CDC). (2004). Web-based Injury Statistics Query and Reporting System (WISQARS) [Online]. 2004 data for race and ethnicity. Retrieved October 10, 2007, from http://www.cdc.gov/ncipc/wisqars

Centers for Disease Control and Prevention (CDC). (2005). Youth risk behavior surveillance United States, 2005 Surveillance summaries. *Morbidity and Mortality Weekly Report, 55*, 1-108.

Choi, Y., He, M., & Harachi, T. (2008). Intergenerational cultural dissonance, parent-child conflict and bonding, and youth problem behaviors among Vietnamese and Cambodian Immigrant Families. *Journal of Youth and Adolescence*, *37*(1), 85-96.

Clark-Lempers, D., Lempers, J, & Ho, C. (1991). Early, middle, and late adolescents' perceptions of their relationships with significant others. *Journal of Adolescent Research, 6*(3), 296-315.

Cohen, J., Cohen, P., West, S.G., & Aiken, L.S. (2003). *Applied multiple regression-correlation analysis for the behavioral sciences.* (3rd ed.). Mahwah, NJ: Erlbaum.

Conner, K., Duberstein, P., Conwell, Y. & Caine, E. (2003). Reactive aggression and suicide: theory and evidence. *Aggression and Violent Behavior, 8*, 413-32.

Cook, T., Cooper, H., Cordray, D., Hartmann, H., Hedges, L., Light, R. & et al. (1992). *Meta-analysis for Explanation*. New York: Russell Sage Foundation.

Cooper, H. & Hedges, L. (1994). *The handbook of research synthesis.* New York: Russell Sage Foundation.

Cooper-Patrick, L., Gallo, J., Powe, N., Steinwachs, D., Easton, W., & Ford, D. (1999). Mental health service utilization by African Americans and Caucasions: The Baltimore Epidemiologic Catchment Area Follow-Up. *Medical Care, 37,* 1034-1045.

Cose, E. (2002). *The envy of the world: On being a Black man in America.* New York: Washington Square Press.

Das, A., Olfson, M., McCurtis, H., & Weissman, M. (2006). Depression in African-Americans: Breaking barriers to detection and treatment: Community studies tend to ignore high-risk groups of African-Americans. *Journal of Family Practice*, *55*, 30-39.

Davis, J.E. (2003). Early schooling and academic achievement of African American males. *Urban Education, 38*(5), 515-537.

Davis, R. (1980). Suicide among young blacks: Trends and perspectives. *Phylon*, 41, 223– 229.

Daumit, G., Crum, R., Guallar, E., Powe, N., Primm, A., Steinwachs, D., & Ford, D. (2003). Outpatient prescriptions for atypical antipsychotics for African Americans, Hispanics, and Whites in the United States. *Archives of General Psychiatry, 60*, 121-128.

Discussions of the Vienna Psychoanalytic Society—1910. With particular reference to suicide among young students. With contributions by Alfred Adler, Sigmund Freud, Joseph K. Friedjung, Karl Molitor, David Ernst Oppenheim, Rudolf Reitler, J. Sadger, Wilhelm Stekel. Edited by Paul Friedman. New York: Int. Univ. Press, 1967.

Doan, J., Roggenbaum, S., & Lazear, K.. (2003). Youth suicide prevention school-based guide (c/p/r/s)—American Association of Suicidology Statistics. Tampa, FL: Department of Child and Family Studies, Division of State and Local Support, Louis de la Parte Florida Mental Health Institute, University of South Florida. (FMHI Series Publication #219-S).

Dodge, K. & Coie, J. (1987). Social-information-processing factors in reactive and proactive aggression in children's peer groups. *Journal of Personality and Social Psychology, 53,* 1146-1158.

Dougherty, P. (2007). Research synthesis: Adolescent suicide and substance abuse in the

United States, 1990-2002. *Journal of Addictions Nursing, 18,* 81-91.

Dumais, A., Lesage, A. D., Aida, M., Rouleau, G., Dumont, M. & Ghawky, N. (2005). Risk factors for suicide completion in major depression: A case-control study of impulsive and aggressive behaviors in men. *American Journal of Psychiatry,162*, 2116-2124.

Durant, T., Mercy, J., Kresnow, M.-J., Simon, T., Potter, L. & Hammond, W. R. (2006). Racial differences in hopelessness as a risk factor for a nearly lethal suicide attempt. *Journal of Black Psychology,* 32, 285–302.

Early, K. E. & Akers, R. L. (1993). "It's a White thing": An exploration of beliefs about suicide in the African American community. *Deviant Behavior, 14,* 277-296.

Fenton, W. (2000). Depression, suicide, and suicide prevention in schizophrenia. *Suicide and Life Threatening Behavior, 30,* 34-49.

Ferguson, G.O. (1916). The psychology of the Negro. *Archives of Psychology, 36*, 138.

Fingerhut, L. & Kleinman, J. (1990). International and interstate comparisons of homicide among young males. *Journal of the American Medical Association, 263,* 3292-3295.

Fitzpatrick, K. M., Piko, B. F., Wright, D. R. & LaGory, M. (2005). Depressive symptomatology, exposure to violence, and the role of social capital among African American adolescents. *American Journal of Orthopsychiatry,* 75, 262-274.

Freud, S. (1949). Mourning and melancholia In *Collected papers,* vol.4. London: Hogarth.

Gall, J., Gall, M., & Borg, W. (2005). *Applying educational research: A practical guide.* Boston, MA: Pearson.

Garlow, S.J., Purselle, D., & Heninger, M. (2005). Ethnic differences in patterns of suicide across the life cycle. *American Journal of Psychiatry, 159*(4), 615-619.

Gibbs, J. (1988). *Young, black, and male in America: An Endangered Species*. Dover. MA: Auburn House Publishing Company.

Gibbs, J. (1997). African-American suicide: A cultural paradox. *Suicide and Life-Threatening Behavior, 27*, 68–79.

Gibbs, J & Bankhead, T. (2000). Joblessness and hopelessness: The case of African American youth in south central Los Angeles. *Journal of Ethnic & Cultural Diversity in Social Work, 9*(1-2), 1-20.

Glass, G.V. (1977). Integrating findings: The meta-analysis of research. *Review of Research in Education, 5,* 351-379.

Grant, K., O'Koon, J., Davis, T., Roache, N., Poindexter, L., Armstrong, M., Minden, J. & McIntosh, J. (2000). Protective factors affecting low income urban African American youth exposed to stress. *Journal of Early Adolescence,* 20, 4, 388-417.

Group for the Advancement of Psychiatry (GAP, 1989). Suicide and ethnicity in the United States, Report No. 128. New York: Brunner Mazel.

Guzzo, R., Jackson, S., & Katzell, R. (1987). Meta-analysis analysis. *Research in Organizational Behavior,* 9, 407-442.

Hall, G.S. (1904). *Adolescence: Its psychology and its relation to physiology, anthropology, sociology, sex, crime, religion and education, Vol. 2.* New York: D. Appleton.

Hampton, M. (2007). The role of treatment setting and high acuity in the overdiagnosis of schizophrenia in African Americans. *Archives of Psychiatric Nursing, 21*(6), 327-335.

Harris, T. & Molock, S. (2000). Cultural orientation, family cohesion and family support in suicide ideation and depression among African American college students. *Suicide and Life-Threatening Behavior, 30*(4), 341-353.

Holinger, P. & Klamen, E. (1982). Violent deaths in the United States 1900-1975: Relationships between suicide, homicide and accidental deaths. *Social Science & Medicine, 16*(22), 1929-1938.

Hunter, J., & Schmidt, F. (1990). *Methods of meta-analysis: Correcting error and bias in research findings.* Newbury Park, CA: Sage.

Jackson, F. & Moore, J. (2006). African America males in education: Endangered or ignored? *Teachers College Record, 108*(2), 201-205.

Joe, S. (2006). Explaining changes in the patterns of black suicide in the United States from 1981 to 2002: An age, cohort, and period analysis. *Journal of Black Psychology, 32*(3), 262-284.

Joe, S. & Kaplan, M.S. (2001). Suicide among African American men. *Suicide and Life-Threatening Behavior, 31*(Suppl.), 106-121.

Joe, S. & Kaplan, M.S. (2002). Firearm-related suicide among young African American males. *Psychiatric Services, 53,* 332-334.

Joe, S. & Marcus, S.C. (2003). Trends by race and gender in suicide attempts among U.S. adolescents, 1991-2001. *Psychiatric Services, 54*(4), 454.

Jung, C.G. (1959). The soul and death. In H. Feifel (Ed.). *The meaning of death.* New York: McGraw-Hill.

Johnson, J., Cohen, P., Gould, M., Kasen, S., Brown, J., & Brook, J. (2002). Childhood adversities, interpersonal difficulties, and risk for suicide attempts during late adolescence and early adulthood. *Archives of General Psychiatry, 59,* 741-749.

Karch, D., Crosby, A., & Simon, T. (2006). Toxicology testing and results for suicide victims --- 13 States, 2004. *Morbidity and Mortality Weekly Report, 55*(46), 1245-1248.

Kendrick, L., Anderson,N. & Moore, B. (2007). Perceptions of depression among young African American men. *Family Community Health, 30*(1), 63-73.

Kubrin, C. E. , Wadsworth, T., & DiPetro, S. (2006). Deindustrialization, disadvantage, and suicide among young black males. *Social Forces, 84*(3), 1559-1579.

Kunjufu, J. (2005). *Keeping Black boys out of special education.* Chicago, IL: Independent Publishers Group.

Kuno, E. & Rothbard, A. (2002). Racial disparities in antipsychotic prescription patterns for patients with schizophrenia. *American Journal of Psychiatry, 159*(4), 567-572.

Lewinsohn, P., Rohde, P., Seeley, J. (1994). Psychosocial risk factors for future adolescent suicide attempts. *Journal of Consulting and Clinical Psychology, 62,* 297-305.

MacLeod, J. (1987). *Ain't no makin' it: Leveled aspirations in a low-income neighborhood.* Boulder, CO: Westview.

Mark, T., Palmer, L., Russo, P., & Vasey, J. (2003). Examination of treatment pattern differences by race. *Mental Health Services Research, 5*(4), 241-250.

Marttenun, M., Henricksson, M., Aro, H., Heikkinen, M., Isometsa, E., & Lonnqvist,. J. (1995). Suicide among female adolescents: Characteristics and comparison with males in the age group 13 to 22 years. *Journal of the American Academy of Child and Adolescent Psychiatry, 34*(10), 1297-1307.

Mayo, M.J. (1913). The mental capacity of the American Negro. *Archives of Psychology, 4*(28), 70.

McNamara, J.F., Morales, P., Kim, Y., & McNamara, M. (1998). Conducting your first meta-analysis: An illustrative guide. *International Journal of Educational Reform, 7,* 380-397.

Michaelis, B., Goldberg, J. & Davis, G. (2004). Dimensions of impulsivity and aggression associated with suicide attempts among bipolar patients: A preliminary study. *Suicide and Life Threatening Behavior, 34*, 172-176.

Murphy, G., Wetzel, R., Robins, E., & McEvoy, L. (1992). Multiple risk factors predict suicide in alcoholism. *Archives of General Psychiatry, 49*, 459-463.

Murray, C., Kulkarni, S., & Ezzati, M. (2005). Eight Americas: New perspectives on US health disparities. *American Journal of Preventive Medicine, 29*(5), 4-10.

Neighbors, H., Trierweiler, S., Ford, B., & Muroff, J. (2003). Racial differences in DSM diagnosis using a semi-structured instrument: The importance of clinical judgment in the diagnosis of African Americans. *Journal of Health and Social Behavior, 44*(3), 237-256.

Nobles, W (1991). African philosophy: Foundations of Black psychology. In R.L.Jones, (Ed). *Black psychology*, 3rd ed. Berkeley, CA: Cobb & Henry.

Noguera, P.A. (2003). The trouble with Black boys: The role and influence of environmental and cultural factors on the academic performance of African American males. *Urban Education, 38*(4), 431-459.

Opolka, J., Rascati, K., Brown, & Gibson, P. (2004). Ethnicity and prescription patterns for haloperidol, risperidine, and olanzapine. *Psychiatric Services, 55*(2), 151-156.

Phinney, J. S., Ong, A. & Madden, T. (2000). Cultural values and intergenerational value discrepancies in immigrant and nonimmigrant families. *Child Development,* 71, 2, 528-539.

Poussaint, A. & Alexander, A. (2000). *Lay my burden down: Suicide and the mental health crisis among African Americans.* Boston: Beacon Press.

Prange, A.J. & Vitols, M.M. (1962). Cultural aspects of the relatively low incidence of depression in southern Negroes. *International Journal of Social Psychiatry, 8,* 104-112.

Prudhomme, C. (1938). The problem of suicide in the American Negro. *Psychoanalytic Review, 25,* 187-204, 373-394.

Randell, B., Wang, W., Herting, J., & Eggert, L. (2006). Family factors predicting categories of suicide risk. *Journal of Child and Family Studies, 15*(3), 255-270.

Reiss, A. & Roth, J. (1993). *Understanding and preventing violence.* Washington, DC: National Academy Press.

Romanov, K., Hatakka, M., Keskinen, E., Laaksonen, H., Kaprio, J., Rose, R. J. & Koskenvuo, M. (1994). Self-reported hostility and suicidal acts, accidents, and

accidental deaths: A prospective study of 21,443 adults aged 25-59. *Psychosomatic Medicine, 56*, 328-336.

Rosenthal, R. (1991). *Meta-analysis procedures for social research*. Newbury Park, CA: Sage.

Rosenthal, R. (1994). Parametric measures of effect size. In H.M. Cooper & L.V. Hedges (Eds.), *The handbook of research synthesis.* (pp. 231-244). New York: Russell Sage Foundation.

Roy, A. & Linnoila, M. (1986). Alcoholism and suicide. *Suicide and Life-threatening Behavior, 16,* 244-273.

Sabol, W., Couture, H., & Harrison, P. (2007). Prisoners in 2006. *Bureau of Justice Statistics Bulletin.* U.S. Department of Justice: Office of Justice Programs.

Scheier, L. & Botvin, G. (1998). Relations of social skills, personal competence, and adolescent alcohol use: A developmental exploratory study. *Journal of Early Adolescence, 18*, 77-114.

Seidman, S. (1995). *The postmodern turn: New perspectives on social theory*. New York: Cambridge University Press.

Shaffer, D., Gould, M.S., Fisher, P., Trautman, P., Moreau, D., Kleinman, M. & Flory, M. (1996). Psychiatric diagnosis in child and adolescent suicide. *Archives of General Psychiatry, 53,* 339-348.

Shakespeare, W. (1603). *The Tragedy of Hamlet, Prince of Denmark. The Arden Shakespeare.* London: Rouledge, 1982.

Shellman, J., Mokel, M. & Wright, B. (2007). Keeping the bully out: Understanding older African Americans' beliefs and attitudes towards depression. *Journal of the American Psychiatric Nurses Association, 13*(4), 230-236.

Shneidman, E. (1977). The psychological autopsy, In L. Gottschalk et. al. (Eds.) *Guide to the investigation & reporting of drug-abuse deaths*. Rockville, MD: Department of Health Education and Welfare.

Silverman, M.M. (2006). The language of suicidology. *Suicide and Life-Threatening Behavior, 36*(5), 519-532.

Snowden, L. R. & Cheung., F. K. (1990). Use of inpatient mental health services by members of ethnic minority groups. *American Psychologist, 45,* 347-55.

Snyder, H. Sickmund, M. & Poe-Yamagata, E. (1996). *Juvenile offenders and victims: 1996 update on violence.* Pittsburgh, PA. National Center for Juvenile Justice.

Strakowski, S., Keck Jr., P., Arnold, L., Collins, J., Wilson, R., Fleck, D., et al. (2003). Ethnicity and diagnosis in patients with affective disorders. *Journal of Clinical Psychiatry, 64*(7), 747-754.

Swahn, M. & Bossarte, R. (2007). Gender, early alcohol use, and suicide ideation and attempts: Findings from the 2005 Youth Risk Behavior Survey. *Journal of Adolescent Health, 41,* 175-181.

Tarver, D., Wong, N., Neighbors, H., & Zimmerman, M. (2004). The role of father support in the prediction of suicidal ideation among Black adolescent males. In N. Way & J. Y. Chu (Eds.), *Adolescent boys: Exploring diverse cultures of boyhood* (pp. 144-166). New York: New York University Press.

Thompson, M., Kaslow, N. & Kingree, J. (2002). Risk factors for suicide attempts among African American women experiencing recent intimate partner violence. *Violence and Victims, 17*, 283-295.

Thompson, W. & Hickey, J. (1994). *An introduction to sociology: Society in focus.* New York: Harpercollins College.

Trierweiler S., Neighbors H., Munday C., Thompson E., Binion V., Gomez J. (2000) Clinician attributions associated with the diagnosis of schizophrenia in African American and non-African American patients. *Journal of Consulting Clinical Psychology ,68,* 171-175.

United States Census Bureau (2004). Current population survey reports. Retrieved October 14, 2006, from http://www.census.gov/population/socdemo/race/black/ppl-186/tab1.pdf

United States Department of Health and Human Services (USDHHS). (2001). *Mental health: Culture, race, ethnicity.* Rockville, MD: USDHHS, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institute of Health, National Institute of Mental Health.

United States Department of Health and Human Services (USDHHS). (2007). *Schizophrenia publication.* Bethesda, MD: USDHHD, Public Information and Communications Branch, National Institute of Health, National Institute of Mental Health.

United States Department of Justice (2005). Prison and jail inmates at midyear 2005. *Bureau of Justice Statistics Bulletin.* Retrieved October 10, 2006, from http://www.ojp.gov/bjs/pub/pdf/pjim05.pdf

United States Public Health Service. (2000). *The Surgeon General's call to action to prevent suicide, 1999.* Washington, DC: Author.

Vitiello, B. & Stoff, D. (1997). Subtypes of aggression and their relevance to child psychiatry. *Journal of the American Academy of Child and Adolescent Psychiatry, 36,* 307-315.

Wahl, C. W. (1957). Suicide as a magical act. In E.S. Shneidman & N.L. Faberow (Eds.), *Clues to suicide.* New York: McGraw-Hill.

Walker, R.L. (2007). Acculturation and acculturative stress as indicators for suicide risk among African Americans. *American Journal of Orthopsychiatry, 77*(3), 386-391.

Walker, R.L., Lester, D., & Joe, S. (2006). Lay theories of suicide: An examination of culturally relevant suicide beliefs and attributions among African Americans and European Americans. *The Journal of Black Psychology, 32*(3), 320-334.

Whitt, H. (2006). Where did the bodies go? The social construction of suicide data, New York City, 1976-1992. *Social Inquiry, 76*(2), 166-187.

Wiley, Ed. (1992). What's in a Label? Scholars Debate Use of "Endangered" Tag to Describe Black Male Condition. *Black Issues in Higher Education* (January 1992): 12-14.

Willis, L.A., Coombs, D.W., Cockerham, W., & Frison, S. (2002). Ready to die: A postmodern interpretation of the increase of African-American adolescent male suicide. *Social Science & Medicine, 55*, 907-920.

Wingate. L. Bobadilla, L., Burns, A., Cukrowicz, K., Hernandez ,et al (2005). Suicidality in African American men: The roles of southern residence, religiosity, and social support. *Suicide and Life-Threatening Behavior, 35*(6), 615-629.

Wolf, F. (1986). *Meta-analysis: Quantitative methods for research synthesis*. Beverly Hills, CA: Sage.

Worrell, F. & Hale, R. (2001). The relationship of hope in the future and perceived school climate to school completion. *School Psychology Quarterly, 16*(4), 370-388.

Wright, W. (1991). The endangered Black male child. *Educational Leadership, 49*(4), 14-16.

Young, J. (2007). A study of academically high achieving, economically challenged African American Young Men. Retrieved from http://www .blacksuccess foundation.org/sci%20report%20Academically%20Successful%20Black%20Males-John%20Young.htm

Zimmerman, M. A., Salem, D. A., & Notaro, P. C. (2000). Make room for daddy II: The positive effects of fathers' role in adolescent development. In R. Taylor and L. Wang (Eds.), *Resilience across Contexts: Family, Work, Culture, and Community.* Mahwah, NJ: Lawrence Erlbaum.

APPENDIX A

STUDIES UTILIZED IN THE META-ANALYSIS

* Studies with asterisks involve more than one comparison study

Anglin, D., Gabriel, K., & Kaslow, N. (2005). Suicide acceptability and religious well-being: A comparative analysis in African American suicide attempters and non-attempters. *Journal of Psychology and Theology, 33*(2), 140-150.

*Bettes, B. & Walker, E. (1986). Symptoms associated with suicidal behavior in childhood and adolescence. *Journal of Abnormal Child Psychology, 14*(4), 591-604.

Burr, J., Hartman, J., & Matteson, D. (1999). Black suicide in U.S. metropolitan areas: An examination of the racial inequality and social integration-regulation hypotheses. *Social Forces, 77*(3), 1049-1081.

Castle, K., Duberstein, P., Meldrum, S., Conner, K., & Conwell, Y. (2004). Risk factors for suicide in Blacks and Whites: An analysis of data from the 1993 National Mortality Followback Survey. *American Journal of Psychiatry, 161,* 452-458.

Compton, M., Thompson, N, & Kaslow, N. (2005). Social environment factors associated with suicide attempt among low-income African Americans: The protective role of family relationships and social support. *Social Psychiatry and Psychiatric Epidemiology, 40*(3), 175-185.

Garlow, S., Purselle, D., & Heninger, M. (2005). Cocaine and alcohol use preceding suicide in African American and White adolescents. *Journal of Psychiatric Research, 41,* 530-536.

Harris, T. & Molock, S. (2000). Cultural orientation, family cohesion, and family support in suicide ideation and depression among African American college students. *Suicide and Life-Threatening Behaviors, 30*(4), 341-353.

*Ialongo, N., McCreary, B., Pearson, J., Koenig, A., Wagner, B., Schmidt, N. et al. (2002). Suicidal behavior among urban, African American young adults. *Suicide and Life-Threatening Behavior, 32*(3), 256-271.

Ialongo, N., Koenig-McNaught, A., Wagner, B., Pearson, J., McCreary, B., Poduska, J. et al. (2004). African American children's reports of depressed mood, hopelessness, and suicidal ideation and later suicide attempts. *Suicide and Life-Threatening Behavior, 34*(4), 395-407.

Joe, S., Marcus, S., & Kaplan, M. (2007). Racial differences in the characteristics of firearm suicide decedents in the United States. *American Journal of Orthopsychiatry, 77*(1), 124-130.

*Joe, S., Baser, R., Breeden, G., Neighbors, H., & Jackson, J. (2006). Prevalence of and risk factors for lifetime suicide attempts among Blacks in the Unites States. *Journal of the American Medical Association, 296*(17), 2112-2123.

*Juon, H. & Ensminger, M. (1997). Childhood, adolescent, and young adult predictors of suicidal behaviors: A prospective study of African Americans. *Journal of Child Psychology and Psychiatry, 38*(5), 553-563.

Kaslow, N, Price, A., Wyckoff, S., Grall, M., Sherry, A. & Young, S. (2004). Person factors associated with suicidal behavior among African American women and men. *Cultural Diversity and Ethnic Minority Psychology, 10*(1), 5-22.

Kirk, A. & Zucker, R. (1976). Some sociopsychologicl factors in attempted suicide among urban Black males. *Suicide and Life-Threatening Behaviors, 9*(2), 76-86.

Kubrin, C., Wadsworth, T., & DiPietro, S. (2006). Deindustrialization, disadvantage and suicide among young Black males. *Social Forces, 84*(3), 1559-1579.

Lester, D. (1990). Mortality from suicide and homicide for African Americans in the USA: A regional analysis. *OMEGA, 22*(3), 219-226.

Molock, S., Kimrough, R., Lacy, M., McClure, K., & Williams, S. (1994). Suicidal behavior among African American college students: A preliminary study. *Journal of Black Psychology, 20*(2), 234-251.

*Molock, S., Puri, R., Matlin, S., & Barksdalem C. (2006). Relationship between religious coping and suicidal behaviors among African American adolescents. *Journal of Black Psychology, 32*(3), 366-389.

Spann, M., Molock, S., Barksdale, C., Matlin, S., & Puri., R. (2006). Suicide and African American teenagers: Risk factors and coping mechanisms. *Suicide and Life-Threatening Behaviors, 36*(5), 553-568.

*Stein, M., Levy, M., & Glasberg, H. (1974). Separations in Black and White suicide attempters. *Archives of General Psychiatry, 31*, 815-821.

Tarver, D. B., Wong, N. T., Neighbors, H. W., & Zimmerman, M. A. (2004). The role of father support in the prediction of suicidal ideation among Black adolescent males. In N. Way & J. Y. Chu (Eds.), *Adolescent boys: Exploring diverse cultures of boyhood* (pp. 144-166). New York: New York University Press.

*Walker, R., Utsey, S., Bolden, M., & Williams, O. (2005). Do sociocultural factors predict suicidality among persons of African descent living in the U.S. *Archives of Suicide Research, 9*, 203-217.

Watt, T. & Sharp, S. (2002). Race differences in strains associated with suicidal behavior among adolescents. *Youth and Society, 34*(2), 232-256.

*Willis, L., Coombs, D., Drentea, P., & Cockerham, W. (2003). Uncovering the mystery: Factors of African American suicide. *Suicide and Life-Threatening Behaviors, 33*(4), 412-429.

Wingate, L., Bobadilla, L., Burns, A., Cukrowicz, K., Hernandez, A., Ketterman, R. et al. (2005). Suicidality in African American men: The roles of southern residence, religiosity, and social support. *Suicide and Life-Threatening Behaviors, 35*(6), 615-629.

APPENDIX B

CODING MANUAL

Study Citation:

Variable	Variable Name	Coding Key	Value
Study number	ID		
Name of coder	CODER	1 Dedra 2 Antanette	
Publication year	PUBYEAR	Four digit year of publication	
1st Author's affiliation	AUTHAFF	1 University/College 2 Hospital/ Medical Center 3 CDC 4 NIH/NIMH 5 Other 999 Unknown	
Type of journal	JOURNAL	1 Psychology/ Mental Health 2 Suicidology 3Education 4 Sociology 5 Medical 6 Public Health 7 Nursing 8 Other	
Study design	DESIGN	1 Cross-sectional (comparative) 2 Longitudinal (prospective/cohort)	
Assessment for cross sectional studies	CROSSCT	If cross sectional, was assessment conducted 1 Concurrently 2 Retrospectively 3 Both 999 not applicable	
Assessment for prospective studies	PROSPCTV	If prospective, was assessment conducted 1 pre-intervention (treatment) 2 post-intervention (treatment)	
Study setting	SETTING	1 School/university 2 Hospital 3 Multiple settings 4 Other 999 Unknown	
City, State	CITY	Write name of city and state	

		2 Multiple cities 999 Unknown	
Geographic region	GEO	Geographic region 1 South 2 Northeast (NY, NJ, DC) 3 Midwest 4 Southeast 5 West Coast 6 Northwest	
Urban/ Rural/ Suburban	URBAN	1 Urban 2 Rural 3 Suburban 4 Mixed 999 Unknown	
Theory investigated	THEORY		
Total N	SMPLSZE	Enter N	
Predominant group investigated	GROUP	1 College students 2 High school students 3 Middle school students 4 Hospital/ in-patient 5 Incarcerated individuals 6 Multiple groups 7 other	
Mean age	AGE	Enter mean/ median age 999 Unknown	
Minimum age	MINAGE	Enter lowest age of participant	
Maximum age	MAXAGE	Enter highest age of participant	
Percent Afr. Am. male	AAMALE	Enter % AA male 999 Unknown	
Outcome variable 1	OUTCMVAR	1 Completed suicide 2 Suicidal ideation 3 Suicidal behavior 4 Suicide attempt 5 Overdose	
Risk factor 1	RF	1 Depression 2 Drug use 3 Alcohol use 4 Hopelessness 5 Loss of loved one 6 Bipolar disorder 7 Panic disorder 8 OCD	

		9 PTSD 10 ODD 11 Conduct disorder 12 ADHD 13 Family support 14 Religious beliefs 15 Locus of control 16 Criminal justice involvement 17 Acculturation 18 Social Support 19 Age 20 Gender 21 Education 22 Marital status 23 Aggression/ Violence 24 Homelessness 25 Income level 26 Employment status 27 Geographic location 28 Attraction to death 29 Anxiety disorder 30 Antisocial disorder 31 Disruptive disorder 32 Somatic problems 33Antisocial behavior 34 Hostility 35 Isolation 36 Number of moves/ mobility 37 Cocaine use 38 Marijuana use 39 Church attendance 40 Racial segregation 41 Father support 42 Offspring 43 Prior hospitalization/treatment 44 Currently taking medication 45 Suicide acceptability 46 Religious well being 47 Externalizing symptoms 48 Internalizing symptoms 49 Psychotic symptoms 50 Black social integration 51 Stimulant drug use 52 Assault behaviors	

		53 Family involvement 54 Racial disparity 55 Suicidal ideation 56 Reasons for living	
Risk factor 1 category	RFCAT	1 Substance Use 2 Religion 3 Economic variables 4 Location 5 Family 6 Education 7 Internalizing 8 Externalizing 9 Ethnic variables 10 Stressor/ conflict 11 Support 12 Medical/ health 13 Psychological disorder/ behavior 14 Perception 15 Gender 16 Age	
Sample mean for risk factor 1	MEAN 1	Enter sample mean for risk factor 1 999 Unknown	
Standard deviation for risk factor 1	SD1	Enter standard deviation for risk factor 1 999 Unknown	
Correlation coefficient	CORR	Enter correlation coefficient for risk factor 1 and outcome variable	
Type of Measurement for risk factor 1	MEASURE	Enter type of measurement for risk factor 1: 1 Objective measure 2 Interview 3 Self-report 4 other 999 Unknown	
Title of Scale for risk factor 1	SCALE1	Scale: 999 Unknown	
Type of Measurement for outcome	OUTMEASURE	Enter type of measurement for outcome: 1 Standardized suicidal questionnaire 2 Other standardized	

		questionnaire 3 Questions proposed 4 Proposed questionnaire/ interview 5 File reports or other documentation	
Method for calculating effect size	ESMETHOD	1 Correlation 2 Raw score means, SDs, sample sizes 3 Dichotomous outcome, 2x2 table: cell frequencies 4 Dichotomous outcome, 2x2 table: chi-square and total N 5 Between groups t-test 6 Between groups F statistic 7 Probability level and sample size for groups 8 Coding results described only as significant if sample size is known 9 Coding results described as nonsignificant 10 Converting r to d 11 From odds ratio 12 Reported ES in study 13 Other 999 Unknown	

APPENDIX C

MEAN EFFECT SIZES AND STANDARD DEVIATIONS FOR META-ANALYZED SAMPLES OF SUICIDAL BEHAVIORS

	Suicidal			Attempters			Ideators			Ideators & attempters			Completers		
	d	SD	N	d	SD	N	d	SD	N	d	SD	N	d	SD	N
SU	.59	.08	8	.55	.19	4	.61	.03	6	.59	.07	8	.61	.33	6
REL	.49	.11	6	.56	.07	4	.07		1	.59	.11	6	.01		1
ECO	.43	.18	7	.52	.69	4	.54	.14	2	.33	.26	5	.37	.22	4
LOC	.43	.07	5	.43	.17	5	.31	.15	3	.34	.11	7	.49	.10	3
FAM	.38	.14	7	.39	.29	4	.19	.12	4	.35	.15	6	.36		1
EDU	.57	.17	5	.43	.29	4	.27		1	.32	.29	6	.59	.22	2
INT	.68	.13	11	.49	.41	6	.57	.25	6	.64	.13	6	.69	.10	4
EXT	.40	.14	6	.27	.29	7	.18	.17	4	.29	.14	5	.53		1
ETH	.63	.18	5	.64	.26	4	.30		1	.58	.27	5	.48	.37	3
STR	.35		1	.35		1				.35		1			0
SUP	.67	.31	4	.92	.09	2	.43	.21	2	.67	.31	4			0
MED	.28	.15	5	.13	.12	3	.64	.18	2	.28	.15	5			0
PSY	.59	.23	12	.05	.02	3	.58	.12	5	.57	.21	8	.79	.16	6
PER	1.04	.71	4	.96		1	.28		1	.62	.48	2	1.47	.74	2
GEN	.42	.29	3	.12		1	.57	.19	2	.42	.29	3			0
AGE	1.38	1.91	6	1.38	1.91	6			0	1.38	1.91	6			0

VITA

Name:	Dedra Deann Lemon
Address:	Brazosport ISD P.O. Drawer Z Freeport, TX 77542-1926
Email Address:	dedralemon@att.net
Education:	B.A., Psychology, Spelman College, 2003 Ph.D., School Psychology, Texas A&M University, 2008